

2026

Professional Dairy Managers of Pennsylvania (PDMP)

Corn Silage Hybrid Performance Trial Results



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Production Details: PDMP Corn Silage Hybrid Evaluation Trials

Site:	West Grove, PA
Cooperator	Walmoore Holsteins Inc. (Walt Moore)
Planting Date	5/5/2026
Soil Type	Glenelg silt loam
Herbicides	pre- 1.2 qt Calisto Xtra, 1.2 qt Glystar 5 Extra (Roundup) post- 0.75 qt Calisto Xtra, 1 qt Glystar 5 Extra (Roundup)
Previous Crop	Corn followed by barley cover crop
Tillage	Fall cover crop turbo tilled in, corn no tilled into burned off cover
Starter Fertilizer	15 gal UAN
Insecticide	Defcon 4.67G
Manure	18,000 gal/ac dairy manure (split applications)
Fertilizer pre plant	20 gal 27-0-0-3 with DuoMax Stabilizer
Fertilizer sidedress	None
Foliar extras	0.7 oz Source corn, 1 qt TimaUp, 1 qt Kfuel, 4 oz Nano Pro
Harvest Date	9/9/2026

Field Summary:

This site was one of the best locations in 2026. The cooperator does an excellent job with field management, which makes this field summary easy. Soil fertility was optimum and weed management was excellent. Good plant emergence yielded in uniform stands. There was very little disease present at harvest.

Weather Summary:

Month	Precip.	GDD
May	6.3	329
June	3.3	647
July	5.9	803
August	8.0	773
September	2.7	214
Seasonal Total	26.2	2766

Precip. Data: <https://climate.com>

GDD data: <https://climatesmartfarming.org/tools/gdd-calculator>

PDMP Corn Silage Hybrid Testing Program 2026



Late maturity (110-120) day RM silage hybrids in West Grove, PA

Notes: SEE BACKGROUND TAB

Cooperator: 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	40.9	7.9	2.4	2.6	45.6	2.7	28.9	9.8	49.2	65.9	27.3	9.3	5.8	62.7
Seedway	SW 1188SS	111	42	34,000	38.8	7.8	2.3	2.7	40.0	2.9	32.0	9.8	55.9	67.0	26.5	9.0	5.9	65.0
Hoegemeyer	8440V	112	51	34,000	38.7	7.9	1.9	2.8	44.9	3.0	28.0	8.8	56.7	67.1	28.0	9.5	6.3	65.9
Kings Agriseeds	RT 64T39	114	17	34,000	38.3	7.7	2.3	2.9	41.0	2.6	32.0	10.5	53.5	67.8	24.6	8.4	5.4	64.5
Growmark	FS 6265P RIB	112	45	34,000	38.0	7.9	2.2	2.4	45.7	3.0	28.0	9.5	53.0	67.3	28.7	9.8	6.4	64.9
Dekalb	DKC114-14RIB	114	43	34,000	36.9	7.6	2.1	2.7	42.1	2.8	31.0	9.7	55.5	67.7	26.7	9.1	5.9	65.3
Advanta Seeds	ADV XC24111	113	49	34,000	36.7	7.7	2.4	3.0	40.7	2.6	31.7	10.8	52.3	67.1	23.6	8.0	5.1	63.7
Seedway	SW 1331SP	113	45	34,000	36.7	7.8	2.4	3.3	40.3	2.6	31.7	10.7	52.7	67.6	23.1	7.8	5.0	64.1
Dyna-Gro	D54TC77RIB	114	46	34,000	36.6	7.8	2.3	2.7	41.1	2.7	31.0	10.5	53.5	67.1	27.2	9.3	6.0	64.3
Dekalb	DKC61-80RIB	111	42	34,000	36.5	8.2	2.4	2.9	41.1	2.7	30.9	10.1	54.1	66.8	26.6	9.0	5.8	64.5
Advanta Seeds	ADV XC24921	113	19	34,000	36.4	7.5	2.4	2.8	42.5	2.6	32.0	10.8	51.6	67.2	27.2	9.3	5.9	63.3
Revere Seeds	113-T73	113	46	34,000	36.4	7.8	2.4	2.8	43.9	2.8	30.2	10.3	51.4	67.2	24.8	8.4	5.4	63.9
Dekalb	DKC113-62RIB	113	43	34,000	35.9	7.7	2.4	2.8	42.0	2.8	31.8	10.3	53.1	67.3	25.2	8.6	5.5	64.1
Dekalb	DKC111-02RIB	111	43	33,333	35.8	7.8	2.1	3.3	41.6	2.5	30.0	10.1	53.6	67.8	25.7	8.7	5.6	64.8
Channel	212-99SSPRIB	112	43	34,000	35.4	8.1	2.1	3.2	37.8	2.6	32.8	10.3	56.1	67.3	24.0	8.1	5.3	65.1
Hoegemeyer	8594V	114	51	32,667	34.9	7.9	2.2	3.1	41.2	2.7	31.3	9.8	56.3	68.0	25.7	8.7	5.7	65.7
Channel	214-95SSPRIB	114	43	34,000	34.1	8.1	2.3	3.2	40.1	2.7	32.0	10.3	54.7	67.2	24.4	8.3	5.3	64.7
Channel	213-53SSPRIB	113	43	34,000	33.3	7.9	2.5	3.1	40.3	2.6	32.7	10.5	54.6	67.9	25.5	8.7	5.6	64.8
Chemgro	7364PCE	113	34	34,000	32.8	8.0	2.6	3.4	37.8	2.5	33.8	11.4	52.8	68.1	22.9	7.7	5.0	64.0
111-114 day means					36.5	7.8	2.3	2.9	41.6	2.7	31.1	10.2	53.7	67.3	25.7	8.7	5.6	64.5
115-118 day hybrids																		
Growmark	FS 6565P RIB	115	45	34,000	40.7	8.0	2.4	2.8	41.7	2.7	31.0	10.5	52.8	66.2	26.8	9.1	5.8	63.6
Revere Seeds	1839 TC	118	46	34,000	39.8	7.4	2.2	2.4	45.2	3.0	30.2	9.9	54.1	67.4	27.5	9.4	6.1	64.9
Growmark	FS 6665P RIB	116	45	34,000	39.3	7.7	1.9	2.5	47.0	3.0	26.7	8.1	57.0	67.5	29.3	10.0	6.6	66.3
Dekalb	DKC115-81RIB	115	43	34,000	37.1	7.8	2.2	2.7	41.6	3.1	30.3	10.0	54.9	67.2	26.3	9.0	5.8	64.8
Channel	215-40VT4PIRB	115	57	34,000	36.5	8.0	2.3	3.0	40.2	2.6	30.9	10.3	53.8	66.6	25.7	8.7	5.6	64.1
Seedway	SW 1644SP	116	45	34,000	36.0	8.0	2.2	3.1	43.8	2.7	28.8	10.0	53.0	68.1	27.2	9.2	6.0	65.1
Dyna-Gro	D55VC86RIB	115	54	34,000	35.3	7.9	2.5	3.1	39.5	2.6	33.3	11.2	52.0	67.3	24.0	8.2	5.2	63.5
Tidewater Seed Co	Axis Seed 68K80	118	15	34,000	34.8	8.3	2.4	3.4	37.3	2.5	31.1	10.5	52.3	67.1	26.1	8.8	5.6	63.7
Tidewater Seed Co	Axis Seed 67D67	117	46	34,000	33.6	7.9	2.4	2.9	39.0	2.5	32.4	10.7	52.2	67.9	25.4	8.6	5.5	63.8
115-118 day means					37.0	7.9	2.3	2.9	41.7	2.7	30.5	10.1	53.6	67.3	26.5	9.0	5.8	64.4
Overall Mean					36.6	7.9	2.3	2.9	41.6	2.7	30.9	10.2	53.7	67.3	25.9	8.8	5.7	64.5
LSD(0.1)					3.2	0.3	NS	0.4	NS	0.3	NS	NS	3.2	0.5	NS	NS	NS	NS
CV%					6.3	3.1	10.9	11.1	9.1	7.7	10.1	12.4	4.4	0.6	9.0	9.1	10.1	1.9

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 digestibility (% 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

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												Refuge in northern states (higher in the south)	Weed control Trait * check bag tag
				*one or more remain effective (x) *resistance to all, widespread (R) / localized(RL)													
				B C W	C E W	E C B	F A W	S B	S C B	S C W B	T A W	W B C	N C R	W C R			
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	x	R	RL	RL	x	x	RL		R	x	R	5% blend	GLY LL*	
14	AT Refuge Renew (Agrisure3122)		Cry34/35Ab1 mCry3A												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	x	R	RL	RL	x	x	RL		R	x	R	5% blend	GLY LL*	
18	D Refuge Renew (Agrisure5122)		eCry3.1Ab mCry3A												Renew: 5%		
19	Duracade Viptera (Agrisure5222EZ)	DV	Cry1Ab Cry1F Vip3A	x	x	RL	x	x	x	x	x	x	x	R	5% blend	GLY LL*	
20	DV Refuge Renew (Agrisure 5222)		eCry3.1Ab mCry3A												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	x	R	RL	x	x	x	RL		R			5%	GLY LL	
34	or Enlist Refuge Advanced	PCE	Cry1F												Adv 5% blend	Enlist	
35	PowerCore Ultra Enlist	PWUE	Cry1A.105 Cry2Ab2	x	x	RL	x	x	x	x	x	x			5%	GLY LL	
36	or Ultra Enlist Refuge Advanced	PCUE	Cry1F Vip3A												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 SS Enlist Refuge Advanced	SSE	Same as SmartStax	x	R	RL	x	x	x	RL		R	RL	R	5% Adv 5% blend	GLY LL 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% Adv 5% blend	GLY LL Enlist	
45	SSPro Enlist Refuge Advanced SmartStax PRO Refuge Advanced RIB Complete or w/RNAi Tech	SSPro	Same as SmartStax Pro	x	R	RL	x	x	x	RL		R	x	x	5% blend	GLY LL	
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	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 Crv3Bb1 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:
$$\text{OMDI (\%)} = \frac{\{[(\text{crude protein} - \text{NDICP}) \times 0.89] + (\text{total fatty acids} \times 0.75) + (\text{starch} \times \text{IVSD} \div 100) + [(\text{aNDFom} - \text{lignin}) \times \text{NDFD30} \div 100]\}}{[(\text{crude protein} - \text{NDICP}) + \text{total fatty acids} + \text{starch} + (\text{aNDFom} - \text{lignin})] \times 100}.$$

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.