2026

Professional Dairy Managers of Pennsylvania (PDMP)

Corn Silage Hybrid Performance Trial Results



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Production Details: Penn State/PDMP Corn Silage Hybrid Evaluation Trials

Site:	Montoursville
Cooperator	Lycoming County Farm
Planting Date	6/2/2026
Soil Type	
Herbicides pre-	
post-	
Previous Crop	corn
Tillage	no till
Starter Fertilizer	15gal/a UAN
Insecticide	Defcon 4.67G
Manure	
Fertilizer	
Harvest Date	10/1/2026

Field Summary:

Corn emergence at this location was good. Fields were also clean from weeds. There was deer damage along some of the edges that could have impacted some of the plots (Penn State provided no notes on specific plots that were damaged). There was significant disease pressure resulting in fast dry down causing less then ideal moistures at harvest.

Weather Summary:

Month	Precip. In.	GDD
June	2.1	545
July	3.9	725
August	8.1	609
September	6.1	443
Seasonal Total	**20.2**	**2322**

Precip. Data: https://climate.com

GDD data: http://climatesmartfarming.org

PDMP Corn Silage Hybrid Testing Program 2026

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

Mid maturity (99-111) day RM silage hybrids in Montoursville, PA

Notes: SEE BACKGROUND TAB

Cooperator: Lycoming County Farm

Brand	Hybrid	Traits[1]	Relative Maturity	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]
99-105 day hybrids																		
Advanta Seeds	ADV XC26081	17	103	34,000	47.3	7.6	2.3	3.4	43.5	2.4	34.3	12.0	53.7	62.2	15.2	5.1	3.1	61.0
Dekalb	DKC53-94RIB	42	103	34,000	46.9	7.4	2.3	3.3	42.4	2.3	37.2	11.5	52.7	60.3	16.6	5.6	3.4	59.7
Revere Seeds	102-S54 RIB	43	102	34,000	45.0	7.6	2.5	3.3	42.3	2.3	36.9	11.9	49.7	59.7	17.3	5.8	3.4	58.3
Channel	201-07SSPRIB	43	101	34,000	43.9	7.6	2.5	3.1	42.8	2.5	35.8	11.7	50.8	60.3	18.3	6.2	3.7	59.3
Hoegemeyer	7368PCE	34	103	33,167	43.3	7.4	2.1	3.2	43.2	2.4	34.8	10.1	55.1	63.2	18.0	6.1	3.8	62.4
Advanta Seeds	ADV C1041	19	104	33,667	42.5	7.2	2.5	3.1	40.5	2.5	38.0	11.1	55.4	63.8	16.1	5.4	3.4	62.4
Kings Agriseeds	RT 51T86	31	101	34,000	41.5	7.7	2.3	3.3	43.2	2.6	35.2	10.8	53.1	63.2	17.4	5.9	3.6	61.6
Kings Agriseeds	RT 53T49	19	103	33,000	40.5	7.6	2.9	3.5	33.3	2.2	43.4	14.0	53.4	62.8	16.1	5.4	3.3	60.5
Advanta Seeds	ADV XC25791	17	105	32,167	40.4	7.9	2.4	3.3	41.2	2.4	35.5	11.3	51.5	62.6	17.7	6.0	3.6	60.8
Channel	205-98VT4PRIB	57	105	33,000	40.4	7.2	2.5	3.1	41.6	2.4	38.0	11.7	53.0	60.3	18.9	6.4	3.8	59.8
Seedway	SW 0432PE	32	104	34,000	39.2	8.1	2.8	4.0	35.6	2.0	41.7	13.3	52.3	60.4	18.4	6.2	3.7	59.5
Dyna-Gro	D44PN56RA	34	104	33,500	39.2	7.5	2.3	3.2	42.6	2.4	36.0	10.8	52.9	63.5	17.6	6.0	3.7	61.6
Hoegemeyer	7108V	51	101	34,000	38.6	7.5	2.5	3.3	37.4	2.2	40.4	11.7	55.0	61.8	17.0	5.8	3.5	61.1
Dekalb	DKC105-25RIB	43	105	34,000	38.5	7.3	2.7	4.0	34.5	2.0	42.1	14.0	52.0	59.8	17.3	5.8	3.4	58.6
			99-105 day means		***41.9***	***7.5***	***2.5***	***3.4***	***40.3***	***2.3***	***37.8***	***11.9***	***52.9***	***61.7***	***17.3***	***5.8***	***3.5***	***60.5***
106-111 day hybrids																		
Seedway	SW 0760V4	57	107	33,973	42.2	7.5	2.4	3.3	39.5	2.3	38.1	12.2	50.3	60.2	17.6	6.0	3.5	58.8
Seedway	SW 1188SS	42	111	32,667	40.5	8.3	2.6	3.9	36.9	2.3	39.1	12.9	49.9	57.6	18.4	6.2	3.6	57.5
Revere Seeds	110-T50	46	110	34,000	38.2	7.2	2.5	3.6	37.7	2.2	39.5	12.9	50.0	60.8	18.6	6.3	3.7	58.4
Chemgro	6854PCE	34	108	34,000	36.0	7.0	2.4	3.1	38.3	2.3	38.1	10.6	57.7	65.6	20.3	6.9	4.4	64.1
Dyna-Gro	D46PN97RA	34	106	34,000	35.7	7.9	2.2	3.6	39.6	2.4	36.5	10.6	56.1	62.7	18.6	6.3	3.9	62.5
Hoegemeyer	7700PCE	34	107	34,000	35.3	7.9	2.4	3.8	37.6	2.2	38.1	11.7	53.8	61.2	17.9	6.0	3.6	60.7
Advanta Seeds	ADV C1107	47	110	34,000	35.2	7.7	2.5	3.2	36.5	2.4	39.2	12.0	52.4	63.3	18.0	6.1	3.7	60.8
Hoegemeyer	7784V	51	107	33,167	35.1	7.7	2.3	3.2	40.1	2.4	35.4	10.3	55.5	64.4	18.3	6.2	3.9	63.1
Dekalb	DKC61-80RIB	42	111	34,000	35.1	7.2	2.3	2.9	41.4	2.5	35.1	11.4	52.8	63.6	19.1	6.5	4.0	61.5
Dekalb	DKC111-02RIB	43	111	34,000	34.5	7.5	2.5	3.4	38.3	2.3	37.7	12.3	51.5	64.2	18.0	6.1	3.7	61.0
Hoegemeyer	8220PCE	34	112	34,000	34.4	6.9	2.5	2.9	40.4	2.2	37.2	11.6	52.8	65.9	20.1	6.8	4.3	62.3
Growmark	FS 6166P RIB	45	111	34,000	34.3	8.0	2.7	3.7	35.5	2.2	38.9	13.7	49.0	60.8	18.8	6.3	3.7	58.2
Channel	211-42SSPRIB	43	111	32,667	34.2	7.7	2.4	3.3	37.7	2.5	36.7	11.7	52.7	63.3	20.1	6.8	4.2	61.3
Dyna-Gro	D50PN07RA	34	110	34,000	33.7	7.3	2.1	3.1	39.4	2.5	36.1	10.3	57.0	64.7	19.9	6.8	4.3	63.6
Hoegemeyer	7896PCE	34	108	34,000	33.2	8.3	2.6	3.4	35.4	2.3	39.1	12.1	54.5	63.7	19.4	6.6	4.0	61.9
			106-111 day means		***35.8***	***7.6***	***2.4***	***3.4***	***38.3***	***2.3***	***37.7***	***11.8***	***53.1***	***62.8***	***18.9***	***6.4***	***3.9***	***61.0***
			Overall Mean		**38.8**	**7.6**	**2.4**	**3.4**	**39.3**	**2.3**	**37.7**	**11.8**	**53.0**	**62.3**	**18.1**	**6.1**	**3.7**	**60.8**
			LSD(0.1)		**2.7**	**0.5**	**NS**	**0.5**	**4.8**		**4.0**	**1.9**	**2.6**	**2.3**	**2.1**	**0.7**	**0.5**	**1.9**
			CV%		**5.1**	**4.5**	**10.7**	**10.1**	**8.7**	**8.5**	**7.7**	**11.9**	**3.6**	**2.7**	**8.4**	**8.5**	**9.1**	**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

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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.