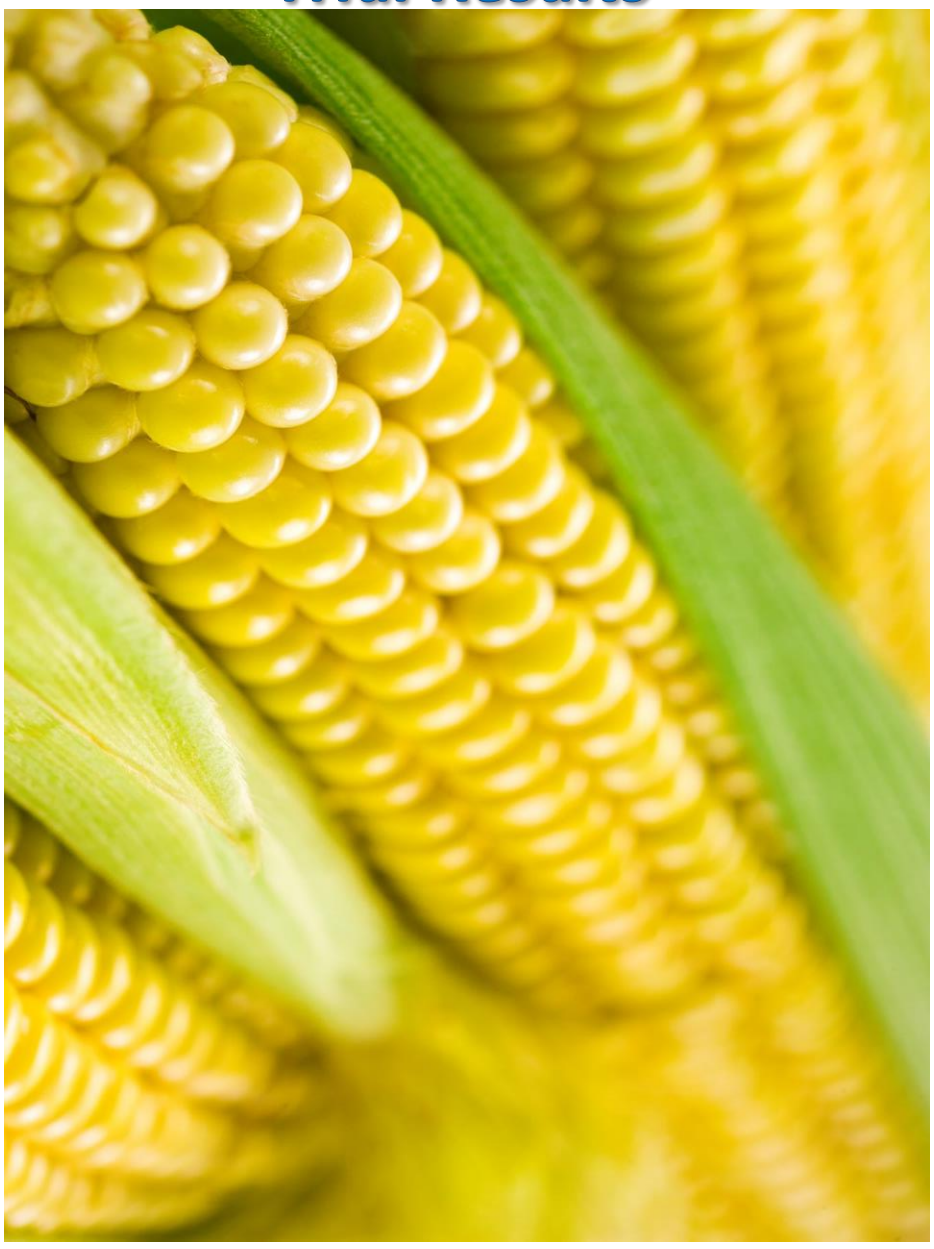
2026

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)

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

Site:	Tioga
Cooperator	Mike Fritz
Planting Date	6/1/2026
Soil Type	
Herbicides pre-	
post-	
Previous Crop	
Tillage	
Starter Fertilizer	
Insecticide	
Manure	
Fertilizer	
Harvest Date	

Field Summary:

This information is requested from PSU Corn Variety Trials, and was not completed.

Weather Summary:

Month	Precip. In.	GDD
June		
July		
August		
September		
Season Total		

Precip. Data: http://wunderground.com

GDD data: http://climatesmartfarming.org/tools/csf-growing-degree-day-calculator/

PDMP Corn Silage Hybrid Testing Program 2026

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

Early maturity (88-103) day RM silage hybrids in Lawrenceville, PA

Notes: SEE BACKGROUND TAB

Cooperator: Mike Fritz

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]
88-97 day hybrids																		
Kings Agriseeds	RT 38T89	17	88	32,000	38.8	7.8	2.5	3.4	40.6	2.6	35.5	11.3	53.1	65.2	18.1	6.1	3.8	62.6
Hoegemeyer	6371V	51	93	34,000	37.5	7.2	1.8	2.9	45.6	2.7	30.0	8.2	57.9	67.7	23.2	7.9	5.2	66.2
Hoegemeyer	6653V	51	96	34,000	34.7	7.4	2.2	3.2	41.2	2.5	33.2	9.1	58.8	68.3	21.8	7.4	4.9	66.4
Channel	195-40VT4PRIB	57	95	34,000	34.2	7.2	2.1	3.0	39.2	2.5	34.9	9.6	59.3	68.1	22.4	7.6	5.0	66.3
Channel	193-40VT4PRIB	57	93	31,000	34.1	6.9	2.1	2.8	41.4	2.7	33.9	9.8	57.8	68.4	22.6	7.7	5.1	66.0
Revere Seeds	092-Y41 RIB	57	92	34,000	33.2	7.2	2.6	3.1	36.7	2.4	37.7	11.8	54.6	67.3	20.9	7.1	4.5	63.6
Growmark	FS 4665P RIB	45	96	34,000	33.0	7.4	2.1	3.0	39.5	2.6	33.4	9.8	57.5	68.2	22.8	7.8	5.1	65.9
Growmark	FS 4565F RIB	57	95	34,000	31.7	7.4	2.2	3.2	37.4	2.5	35.4	9.9	58.6	68.1	20.4	6.9	4.6	65.9
Hoegemeyer	6643PCE	34	96	34,000	31.7	7.6	2.2	3.2	39.8	2.5	33.3	9.9	56.6	67.5	22.5	7.6	5.0	65.2
Dyna-Gro	D36SP96RIB	43	96	30,990	31.6	7.3	2.1	2.6	42.6	2.7	31.9	9.1	59.3	67.5	20.7	7.0	4.7	66.6
Seedway	SW 9595DV	19	95	31,667	30.5	7.8	2.2	3.5	38.1	2.4	34.0	10.1	56.5	67.6	18.5	6.2	4.1	65.1
Dyna-Gro	D33SP06RIB	43	93	34,000	30.4	7.6	2.3	3.4	36.0	2.5	36.6	10.5	58.7	67.7	20.5	6.9	4.6	65.7
Kings Agriseeds	RT 44T29	19	94	32,667	29.5	8.1	2.6	3.7	33.9	2.4	37.7	12.0	54.8	67.1	19.4	6.5	4.2	63.7
Dekalb	DKC093-05RIB	42	93	34,000	28.2	7.4	2.4	3.3	33.6	2.2	38.4	11.0	57.5	69.0	20.4	6.9	4.5	65.4
			88-97 day means		***32.8***	***7.5***	***2.2***	***3.2***	***39.0***	***2.5***	***34.7***	***10.2***	***57.2***	***67.7***	***21.0***	***7.1***	***4.7***	***65.3***
98-103 day hybrids																		
Dekalb	DKC098-55RIB	42	98	34,000	33.1	7.6	2.1	3.3	38.0	2.5	34.4	9.6	59.1	67.8	23.1	7.8	5.2	66.1
Seedway	SW 9822VT	53	98	34,000	31.2	7.3	2.3	3.3	35.6	2.3	37.8	11.1	57.3	67.6	19.5	6.6	4.3	64.8
Chemgro	6364PCE	34	103	33,000	30.9	7.4	2.0	3.1	38.6	2.5	34.6	9.6	59.7	67.6	22.6	7.7	5.1	66.3
Dekalb	DKC101-33RIB	43	101	31,667	30.4	7.4	2.2	3.1	37.8	2.6	35.3	10.1	59.4	67.5	22.0	7.4	4.9	66.1
Revere Seeds	102-S54 RIB	43	102	32,667	29.9	7.6	2.3	3.3	37.2	2.4	35.1	10.1	57.1	67.3	23.4	7.9	5.2	65.0
`			***98-103 day means***		***31.1***	***7.5***	***2.2***	***3.2***	***37.4***	***2.5***	***35.4***	***10.1***	***58.5***	***67.6***	***22.1***	***7.5***	***4.9***	***65.7***
			Overall Mean		**32.3**	**7.4**	**2.2**	**3.2**	**38.6**	**2.5**	**34.9**	**10.1**	**57.5**	**67.7**	**21.3**	**7.2**	**4.7**	**65.4**
			LSD(0.1)		**2.6**	**0.4**	**0.3**	**0.4**	**3.6**	**0.2**	**2.9**	**1.3**	**2.6**	**0.8**	**2.4**	**0.8**	**0.6**	**1.1**
			CV%		**5.7**	**3.8**	**9.4**	**8.6**	**6.7**	**6.2**	**5.9**	**9.3**	**3.2**	**0.8**	**8.1**	**8.1**	**8.4**	**1.2**

[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)

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.