

**2020**

**Maritime Hybrid Testing Report**



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Comments on the Season:

Corn acres were slightly lower this year across the Maritimes due to the disappointing (short and cool) growing season in 2019. Acres across the Maritimes is estimated at 38,000 acres.

The spring of 2020 was very cool but dry. Planting soil conditions were excellent. Soon after planting the temperature increased and the remainder of the season as hotter than normal. There were weeks at a time with very clear skies. Through grain fill moisture was short which limited yields in many areas. There was wide spread frost across the Maritimes September 20 and 21st, most hybrids did not achieve a true black layer by this time. Silage corn was harvested at the normal mid-September window, but corn harvest was very early starting mid October and for many growers was finished by the end of the first week of November which is traditionally the when the Maritimes starts harvesting corn. Grain moisture and quality this year was excellent. Some growers in areas that did not receive rain are disappointed with their yields while other growers on heavier land and traditionally shorter growing seasons are very happy with their results.

Corn insect pests continue to be very concerning. There are many fields across the entire province showing a lot of damage from WBC and CEW. CRW populations are on the increase in fields running corn on corn rotations. Samples of the CRW have been sent to Dr. J. Smith and Yasmine Farhan at the Ridgetown Campus of the University of Guelph for Bt resistance testing. ECB populations continue to be quite high on non-Bt corn. ECB continues to be controlled on hybrids expressing multiple Bt traits. Most corn Grown in the Maritime is Bt, with the non- Bt is incorporated in the bag (Refuge in the Bag- RIB). Those growers not purchasing these type of hybrid MUST continue to plant a separate refuge. This is very important so that resistance does not occur to other Bt events.

Our 2020 Maritime Corn Testing Program had XXX grain and 20 silage hybrids entered from 7 corn companies. Sites were in Berwick and Masstown NS, Sussex and Woodstock NB and Charlottetown PEI. We continue to have a great team in the Maritimes working hard to bring this data to growers during Covid-19. Once again I would like to thank Chris Fleming for his continued hard work on the data, Peter Scott, Dan MacEachern, Jason Wells and their crews for running sites and my crew Jonathon Bent, Jill Macdonald and Shane Wood.

This will be my last year as the co-ordinator of the Maritime Corn Performance Trials. There will be a committee meeting in December to elect a new co-ordinator and set the course for the committee going forward.

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Perennia

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## **ATLANTIC AREA HYBRID EVALUATION SCHEME**

Maturity and yield are both extremely important in short season areas. Hybrids exhibiting performance levels at or above the levels established by six hybrids, designated as standards for the region, will be placed on the performance list. At each test location, 3 hybrids designated as "early" and 3 designated as "late" for the Atlantic Region, are grown along with the currently listed hybrids and those newer hybrids being evaluated.

## **PERFORMANCE INDEX SYSTEM**

A combined yield/maturity index called a Performance Index (P.I.) is calculated for each hybrid in each trial. This P.I. is compared to the P.I. of 100 which is established each year for each trial by the yield and maturity levels of six standard hybrids grown in that trial. A cumulative P.I. for each hybrid is generated by combining the hybrid's data from all locations and years where the test hybrid was grown together with some of the standards. The number of sites X years generating each hybrid's cumulative P.I. are indicated in the cumulative performance tables (pages 13 & 20).

One advantage of the P.I. system is that each hybrid being tested is directly compared only with the standard hybrids, and thus its P.I. is not influenced by the performance of other hybrids under test. Differences in the environment at the sites, or between years, are assumed to similarly affect both the hybrids under test and the standard hybrids. The P.I. system minimizes yearly fluctuations due to weather or other factors, since both the standards and the test hybrids experience the same environmental conditions specific to each location. Statistical tests have indicated that the interactions between hybrids and sites are minimal in the Maritime trials.

Performance Index values below 100 are inferior and those above 100 are superior to the boundaries established by the yield and maturity levels of the standard hybrids on a yield verses maturity graph. NOTE: a specific characteristic of this index is that two or more hybrids can have the SAME P.I., and yet have totally DIFFERENT maturity and/or yield levels. This occurs because the P.I. is a measure of the graphical distance between the maturity/yield point of a specific hybrid and the nearest part of the boundaries set by the standard hybrids.

The standard or check hybrids used in this system provide common reference points over the different tests and years.

## **ATLANTIC CORN HYBRID EVALUATION TRIALS**

<b><u>Trial Area</u></b>	<b><u>Agency</u></b>	<b><u>Trial Coordinator</u></b>	<b><u>Technician</u></b>
Charlottetown	CRDC-AAFC	D. MacEachern	C. Fleming
Sussex/Woodstock	N.B. DAAF	P. Scott	A. Smith
Kentville, N.S.	Perennia	S. Murray	J. Bent
Stewiacke, N.S.	Perennia		J. MacDonald

New hybrids to the Region are evaluated for their production potential at the five Maritime Test Sites located in P.E.I., N.S. and N.B. These trials contain all of the currently 'listed' hybrids, and those new hybrids under test.

## **CRITERIA FOR FURTHER TESTING OR DELETION FROM TESTING**

The criteria allow for further Maritime testing of hybrids with performance similar or superior to the performance of "standard hybrids" grown in all trials. They also permit the acceptance of exceptionally earlier hybrids with somewhat reduced yield potential, or to some extent, exceptional yield with a maturity reduction. The criteria also identify when hybrids will be removed from the Maritime Corn Hybrid Performance List.

### **ACCEPTABLE PERFORMANCE FOR LISTING**

**SILAGE HYBRIDS** may be LISTED when they meet any of the following criteria and have acceptable levels for stalk breakage, emergence and other characteristics.

1. A CUMULATIVE PERFORMANCE INDEX LEVEL of 105.0 or greater with 1 year's testing (minimum 4 sites X years).
2. A CUMULATIVE PERFORMANCE INDEX LEVEL of 100.0 or greater with 2 year's testing (minimum 7 sites X years).
3. A RELATIVE MATURITY LEVEL of (100 plus Y) or greater and a RELATIVE YIELD LEVEL of (100 minus Y) or greater, where Y equals 0.1 to 10 (minimum 7 sites X years).
4. A RELATIVE MATURITY LEVEL of 96.0 or greater and a RELATIVE YIELD LEVEL of 105.0 or greater (minimum 7 sites X years).

**GRAIN HYBRIDS** may be LISTED when they meet any of the following criteria and have acceptable levels for stalk breakage, emergence and other characteristics.

1. A CUMULATIVE PERFORMANCE INDEX LEVEL of 105.0 or greater with 1 year's testing (minimum 4 sites X years).
2. A CUMULATIVE PERFORMANCE INDEX LEVEL of 100.0 or greater with 2 year's testing (minimum 7 sites X years).
3. A RELATIVE MATURITY LEVEL of (100 plus Y) or greater and a RELATIVE YIELD LEVEL of (100 minus Y) or greater, where Y equals 0.1 to 10 (minimum 7 sites X years).
4. A RELATIVE MATURITY LEVEL of 96.0 or greater and a RELATIVE YIELD LEVEL of 105.0 or greater (minimum 7 sites X years).

**RETESTING:** New hybrids will be retested a 2nd year if the PERFORMANCE INDEX is 98.0 or greater or if they meet criteria 3 or 4, otherwise they will be dropped from further testing.

**UNACCEPTABLE HYBRID PERFORMANCE:** Companies will be WARNED when a LISTED HYBRID'S CUMULATIVE PERFORMANCE INDEX FIRST DROPS BELOW 98.0, or when CRITERIA 3 OR 4 ARE FIRST NO LONGER MET. If/when the Cumulative Performance Index remains below 98.0, or criteria 3 or 4 are not met, for a 2nd consecutive year, the hybrid will be REMOVED from the Maritime Corn Hybrid Performance List.

Notwithstanding the above, the Atlantic Forage and Corn Team-AFACT reserves the right to, at any time, change the methods of testing, the standard hybrids, the Performance Index system, and/or the criteria for accepting hybrids for testing, supporting hybrids for listing and 'de-list' hybrids in the Region.

## ZONE DESIGNATIONS FOR MARITIME CORN PRODUCTION

The Maritime Provinces have been divided into 4 zones with different corn production potentials. The Corn Heat Unit (CHU) zone designations indicate the general potential of an area for corn production. Within any Production Zone, small pockets with better or poorer corn potential may occur due to topography, soil types, drainage, frost potential, etc.. Early maturity is the key to quality in both silage and grain corn production. The hybrids suitable for each zone are identified in the Maritime Corn Hybrid Lists.

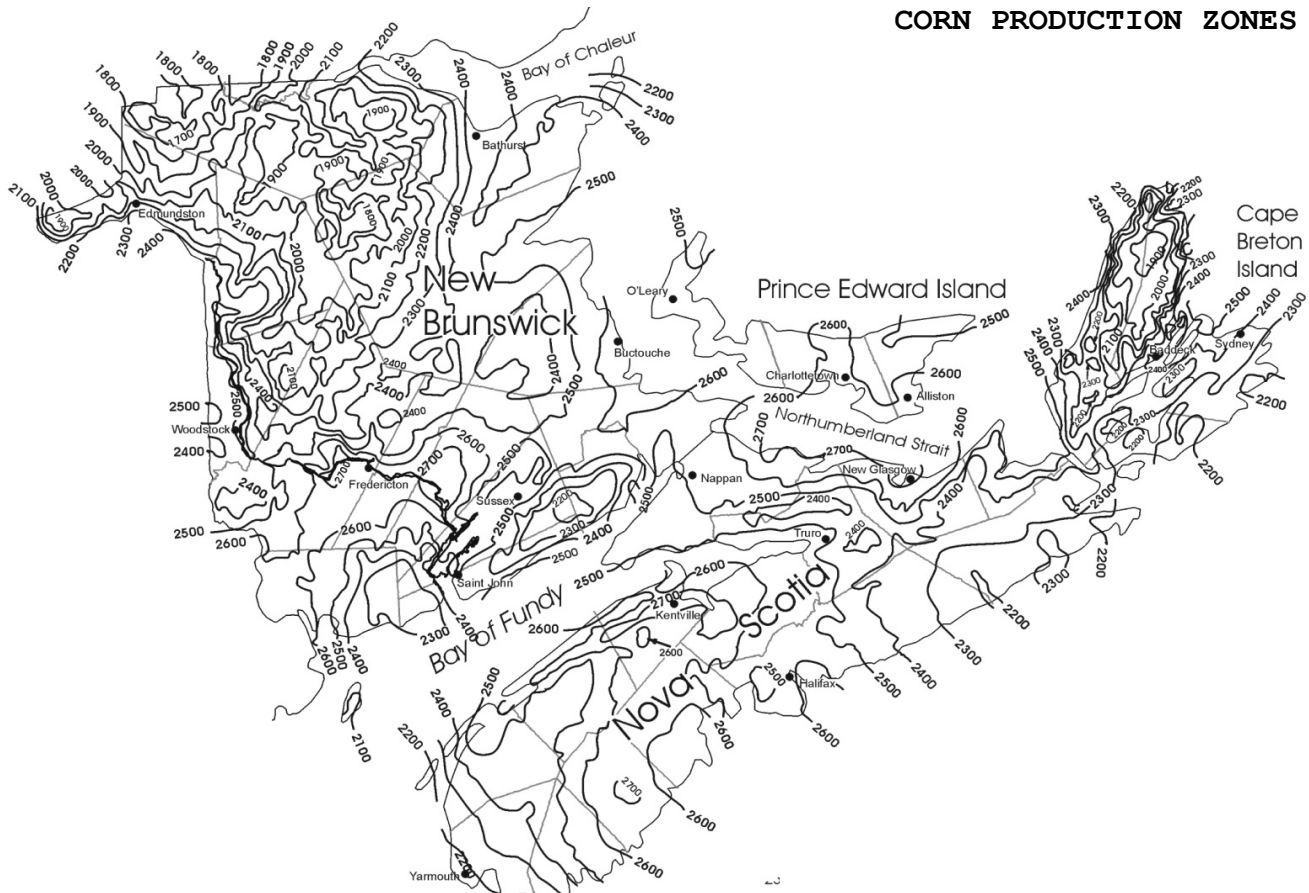
**ZONE 1:** (Over 2500 CHU's) Greatest potential for corn production as either silage or grain exists in this zone. Field to field soil variations should be considered when selecting corn hybrids.

**ZONE 2:** (2300-2500 CHU's) Early hybrids are required for good silage maturity. The earliest grain hybrids will produce acceptable high moisture ear corn and high moisture grain.

**ZONE 3:** (2200-2300 CHU's) Only the earliest hybrids will produce acceptable silage in this zone. High moisture ear corn or high moisture grain production is quite risky.

**ZONE 4:** (Less than 2200 CHU's) Corn production is very risky and corn will usually freeze before becoming sufficiently mature for acceptable silage. Some of these areas on Cape Breton Island and Newfoundland have had impressive silage corn yields when planting into a biodegradable plastic strips.

### CORN PRODUCTION ZONES



**LIST OF CORN SEED SUPPLIERS INVOLVED IN TESTING**

<b>Hybrid Brand</b>	<b>Hybrid Tester</b>	<b>Address</b>	<b>Website</b>
Dekalb	Bayer CropScience	4325 rue Saint-Félix, Québec, Québec G1Y 1X6	<a href="https://www.dekalb.ca/corn/hybrids">https://www.dekalb.ca/corn/hybrids</a>
Pioneer	Corevta Agriscience	7398 Queens line P O Box 730, Chatham, ON N7M 5L1	<a href="https://www.pioneer.com/ca-en/products/corn.html">https://www.pioneer.com/ca-en/products/corn.html</a>
Brevant	Corevta Agriscience	7398 Queens line P O Box 730, Chatham, ON N7M 5L1	<a href="https://www.brevant.ca">https://www.brevant.ca</a>
Pickseed	DLF Pickseed Canada	1 Greenfield Road, Box 304 Lindsay, ON K9V 4S3	<a href="https://www.dlfpickseed.ca">https://www.dlfpickseed.ca</a>
Pride	Pride Seeds	P.O. Box 1088 Chatham, ON N7M 5L6	<a href="https://www.prideseed.com">https://www.prideseed.com</a>
Syngenta	Syngenta Canada	15910 Medway Road, Arva ON, N0M 1C0	<a href="https://www.syngenta.ca/nk">https://www.syngenta.ca/nk</a>
Maizex	Maizex Seeds Inc.	4488 Mint Line, Tilbury, ON, N0P 2L0	<a href="http://www.maizex.com">http://www.maizex.com</a>

## MARITIME GRAIN CORN HYBRID PERFORMANCE LIST

(all hybrids listed below have minimum of 2 years testing)

Production Zone	Hybrid Identity	Refuge Needs	Special Traits	Yield @ 15.5% Moisture (t/ha)	Grain Moisture Content (%)	Stalk Break (%)	# Sites X Years Tested
1+2+3	A3993G2 RIB (PRIDE)	RIB	VT2/RR2	8.7	23.1	5	15
1+2+3	A4646G2 RIB (PRIDE)	RIB	VT2/RR2	9.3	25.2	5	15
1+2+3	E44H12 R (MAIZEX)	RIB	VT2/RR	9.4	25.3	5	10
1+2+3	DKC26-40RIB (DEKALB)	RIB	VT2/RR	9.1	25.6	5	10
1+2+3	B78R96AM (BREVANT)	AM	AM/RR2/LL	9.0	25.6	9	10
1+2+3	P7955AM (PIONEER)	AM	AM/RR2/LL	9.6	25.7	9	10
1+2+3	PS 2210VT2P RIB (PICKSEED)	RIB	VT2/RR	9.2	25.8	5	27
1+2	MZ1688DBR (MAIZEX)	RIB	VT2/RR2	9.5	25.9	5	10
1+2	E49K32 R (MAIZEX)	RIB	VT2/RR	10.3	26.5	5	15
1+2	A4939G2 RIB (PRIDE)	RIB	VT2/RR2	9.5	26.6	7	32
1+2	P7940AM (PIONEER)	AM	AM/RR2/LL	8.8	27.3	10	10
1+2	P8234AM (PIONEER)	AM	AM/RR2/LL	9.5	27.7	5	19
1+2	P7861AM (PIONEER)	AM	AM/RR2/LL	9.6	27.9	5	10
1	PS2321VT2P RIB (PICKSEED)	RIB	VT2/RR	9.1	28.0	16	23
1	PS2333 RR (PICKSEED)	N/A	RR	9.6	28.8	10	19
1	B82R52AM (BREVANT)	AM	AM/RR2/LL	9.8	30.3	5	10

Refuge Needs: NA = Not applicable where this hybrid is not a Bt hybrid;  
RIB, RA or AM = Bt refuge compliance is in the same seed bag;

Special Traits are: AM= AcreMax insect protection VT2 = VT DoublePro insect protection; RR OR RR2 = Roundup Ready hybrid; LL= Liberty tolerant hybrid

## MARITIME SILAGE CORN HYBRID PERFORMANCE LIST

(hybrids listed below have minimum of 2 years testing)

Production Zone	Hybrid Identity	Refuge Needs	Special Traits	Plant Yield (t/ha)	Plant Dry Matter (%)	Stalk Breakage (%)	# Sites X Years Tested
1+2+3	P7527AM (PIONEER)	AM	AM/RR/LL	16.8	38.1	0	9
1+2+3	AS1017RR EDF (PRIDE)	N/A	RR	18.5	37.1	2	15
1+2+3	P7861AM (PIONEER)	AM	AM/RR/LL	16.8	36.5	0	10
1+2+3	AS1027RR EDF (PRIDE)	N/A	RR	19.7	36.2	2	15
1+2+3	PS 2210VT2P (PICKSEED)	RIB	VT2/RR	16.6	36.1	0	29
1+2+3	MS7420R (MAIZEX)	N/A	RR	17.6	36.0	1	14
1+2+3	PS 2321VT2P (PICKSEED)	RIB	VT2/RR	18.2	35.4	3	24
1+2	A4939G2 RIB (PRIDE)	RIB	VT2P/RR	17.3	35.4	0	34
1+2	PS 2333RR (PICKSEED)	N/A	RR	18.1	35.0	1	19
1+2	P8234AM (PIONEER)	AM	AM/RR/LL	17.4	35.0	0	19
1+2	B82R52AM (BREVANT)	AM	AM/RR/LL	17.3	34.8	0	10
1+2	DKC 32-12 RIB (DEKALB)	RIB	VT2/RR	17.7	34.7	0	24
1+2	A4705HMRR (PRIDE)	N/A	RR	18.3	34.2	1	15

Refuge Needs: NA=Not applicable where this hybrid is not a Bt hybrid;  
RIB or AM= Bt refuge compliance is in the same seed bag.

Special Traits are: AM= AcreMax insect protection, VT2 = VT DoublePro insect protection  
RR OR RR2 = Roundup Ready hybrid; LL= Liberty tolerant hybrid



## Long Season Silage Hybrid Performance Summary

Kentville and Truro Locations

		2018		2019			2020		
<u>Cultivar</u>	<u>Company</u>	Yield	Dry Matter	Lodging	Yield	Dry Matter	Lodging	Yield	Dry Matter
		(mt/Ha)	(%)	(%)	(mt/Ha)	(%)	(%)	(mt/Ha)	(%)
NK8618	Syngenta							18.35	16.75
NK8288	Syngenta			1	33.2	27.3			
DKC38-55RIB	Dekalb			1	40	28.1		17.15	35.15
PS 2563GSX RIB	Pickseed			1	32.1	26		16	35.5
PS 2635VT2P RIB	Pickseed			1	33.4	29.7		15.4	35.3
AS1037RR EDF	Pride Seeds	18.4	37.8	2	34.4	28.7			
AS1047RR EDF	Pride Seeds	16.8	37.2	2	40.7	26.54		18.9	33.95
LFG8810R	Maizex			3	40.8	24.6			
MS8088R	Maizex			1	35.19	28.2			
E55T32 R	Elite Seeds	18.2	38.4						
E61C37 R	Elite Seeds	18.9	35.3						
MCT480	Masterschoice	17.8	38.4						
MCT3393	Masterschoice			1	26.8	27.5			
MZ 2220EZX	Maizex	18.9	39.7						
P8542AM	Pioneer	15.8	42.1						
P8700AM	Pioneer	17.1	40.3						
PS 2676VT2P RIB	DLF Pickseeds	16.3	39.2						
B81N47PWE	Dow AgroSciences	17.8	38.8						
	Average for the late maturing hybrids	17.6	38.7		35.1	27.4		17.16	31.33
	Average for the normal maturing hybrids	16.9	41.13		20	34		18.2	37.3

Yield and Dry Matter reported are the average from two sites,

Truro and Berwick.

There are three reps per site.

Combined	LSD (5%)	1.009	1.28	1.21	1.35	1.27	2.47
	C.V.	5.216	2.43	7.59	2.91	6.312	3.161

**ATLANTIC REGIONAL CORN TRIAL SITE INFORMATION - 2020**

**AGENCY:** New Brunswick Soil & Crop Improvement Association  
New Brunswick Department of Agriculture, Aquaculture and Fisheries

**TRIAL LOCATION:** Riverview Farms Corp, Williamstown, NB

**SEEDED:** MAY 26, 2020

**HARVESTED:** **SILAGE TRIAL** **GRAIN TRIAL**  
September 16, 2020 October 5, 2020

**FERTILIZER:** 22-13-9 BANDED May 26 238 KG/HA  
21-0-21 BROADCASTED May 14 200 KG/HA

**WEED CONTROL:** 440 ml/ha converge flex + 2.21 L/ha converge 480 on June 5, 2020

**FARMZONE WEATHER DATA:**

	Corn Heat Units	Rainfall (mm)
May	328.1	67.3
June	591.2	42.9
July	790.1	79.4
August	668.7	71.8
Sept	458.5	63.4
Oct	180.9	223.3
May 1- Oct 31	3017.4	534.2

**AGENCY:** New Brunswick Soil & Crop Improvement Association  
New Brunswick Department of Agriculture, Aquaculture and Fisheries

**TRIAL LOCATION:** Two Streams Farm, Knightville, NB

**SEEDED:** May 21, 2020

**HARVESTED:** **SILAGE TRIAL** **GRAIN TRIAL**  
September 9, 2020 October 1, 2020

**FERTILIZER:** 4000 gal/ac liquid dairy manure in fall 2019  
4000 gal/ac liquid dairy manure in spring 2020  
200 lbs/acre 22-18-4 (Procote Zn) banded

**WEED CONTROL:** Converge XT at standard rate pre-emerge (20 acres/case)  
- 330 ml/ha converge flex + 1.67 L/ha converge 480  
Glyphosate at 1L/ac at 3 leaf stage

**FARMZONE WEATHER DATA:**

	Corn Heat Units	Rainfall (mm)
May	304.5	56.8
June	585.7	37.4
July	748.5	97.5
August	715.1	31.1
Sept	475.0	89.5
Oct	232.5	75.2
May 1- Oct 31	3061.2	382.7

AGENCY: Perennia Food and Agriculture

TRIAL LOCATION: Berwick, Nova Scotia

SEEDED: MAY 18 2020

HARVESTED: SILAGE TRIAL Sept 15, 2020      GRAIN TRIAL October 27, 2020

FERTILIZER: DAIRY MANURE INCORP. FALL & SPRING 80 T/HA  
 23-15-10 +5S BROADCAST MAY 18 200 KG/HA  
 42-0-0 +S BROADCAST JUNE 20

WEED CONTROL: Destra IS 275 gm/ha + Credit Extreme 1.7 l/ha June 5th

**WEATHER CENTRE DATA FROM KENTVILLE RESEARCH STATION**

	Corn Heat Units				Rainfall (mm)			
	2017	2018	2019	2020	2017	2018	2019	2020
May	300	176	128	177	108	66	108	78
June	560	410	531	850	101	118	175	49
July	686	747	746	1028	87	47	49	115
August	646	794	738	1072	86	147	137	71
September	585	405	244	648	71	104	134	122
total	2777	2532	2387	3775	453	482	603	435

AGENCY: Perennia Food and Agriculture

TRIAL LOCATION: Masstown, NS

SEEDED: MAY 22 2020

HARVESTED: SILAGE TRIAL Sept 16, 2020      GRAIN TRIAL October 26, 2020

FERTILIZER: 0-0-60 150 kg/ha Broadcast and incorporated  
 41-0-0+s 225 kg/ha Broadcast June 10th  
 41-0-0+s 225 kg/ha Broadcast June 25th

WEED CONTROL: CONVERGE XT 330 mL/Ha (PRE-EMERGE)  
 CREDIT EXTREME 2.47 l/Ha June 28th

**WEATHER CENTRE DATA FROM DEBERT ENVIRONMENT CANADA**

	Corn Heat Units				Rainfall (mm)			
	2017	2018	2019	2020	2017	2018	2019	2020
May	255	185	122	257	70	94	88	70
June	438	355	417	963	120	176	176	104
July	737	759	638	1989	81	47	118	97
August	724	747	663	1032	119	83	64	89
September	524	375	256	634	212	146	135	82
total	2678	2421	2096	4875	602	546	581	442

**TRIAL LOCATION:** HARRINGTON AAFC FARM, (near Charlottetown)  
 Lot 33 Prince Edward Island 46.341393, -63.157727

**SEEDED:** **SILAGE TRIAL** MAY 30, 2020      **HARVESTED:** **SILAGE TRIAL** SEPT. 29, 2020  
**GRAIN TRIAL** MAY 30, 2020                      **GRAIN TRIAL** OCT. 26, 2020

**FERTILIZER:** K-Mag                      BROADCAST                      MAY 28, 2020 200 KG/HA  
 12-24-24                      BROADCAST                      MAY 28, 2020 300 KG/HA  
 17-17-17                      SIDE DRESSED                      JUNE 2, 2020 200 KG/HA  
 34-0-0                      SIDE DRESSED BY HAND                      JULY 2, 2020 120 KG/HA  
 34-0-0                      SIDE DRESSED BY HAND                      JULY 30 2020 120 KG/HA

**WEED CONTROL:** CONVERGE 480 (ATRAZINE) PRE                      JUNE 2, 2020 1.8 L/HA  
 PLUS DUAL MAGNUM (915g/L) PRE                      JUNE 2, 2020 1.0 L/HA

**PREVIOUS CROP GROWN:** Barley

<b>ACCUM. PRECIPITATION:</b>			<b>ACCUM. CORN HEAT UNITS:</b>	
<b>Harrington</b>	<b>2020</b>	<b>Long Term Mean</b>	<b>2020</b>	<b>Long Term Mean</b>
June	29.5	69.0	535	May - Sept.
July	44.6	78.5	729	for Charlottetown
Aug.	51.9	90.1	729	Weather Station is
Sept.	95.9	91.9	515	Approx. 2600 CHU's
OCT.	88.0	50.4	228	
	309.9 mm	380 mm	27365 CHU	

**Note:** Weather Recorded at AAFC-AAC, Environment Canada Harrington, PE.

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**RELATIVE PERFORMANCE OF THE GRAIN HYBRIDS TO THE  
MEANS OF THE STANDARD HYBRIDS**

Hybrid grain dry matter yields and the % dry matter in the grain, the DM yield of each hybrid relative to the mean of the 3 early standard hybrids (7.67 t/ha), the DM content of each hybrid's grain relative to the mean of the 3 late standard hybrids (71.84 % DM), and the hybrid's Performance Index Value.

HYBRID	Dry Matter Yield (t/ha)	Grain DM Content (%)	Yield Relative to Early Standards	Grain DM Relative to Late Standards	Performance Index
B78R96AM (CORTEVA)	7.64	74.39	99.6	103.6	98.9
B82R52AM (CORTEVA)	8.24	69.73	107.4	97.1	97.1
NK8204-3220 (SYNGENTA)	7.76	69.63	101.1	96.9	96.0
NK7837-3220 (SYNGENTA)	7.42	72.41	96.7	100.8	94.9
NK8005-3220 (SYNGENTA)	7.53	71.11	98.1	99.0	94.9
E49K32 R (MAIZEX)	8.70	73.46	113.4	102.3	102.3
DKC 26-40RIB (BAYER C.S)	7.70	74.42	100.3	103.6	99.5
EXP77-20 (BAYER C.S.)	9.02	73.67	117.5	102.6	102.6
DKC 21-36RIB (BAYER C.S)	7.74	75.23	100.9	104.7	100.6
DKC24-06RIB(BAYER C.S.)	8.26	75.03	107.6	104.4	104.4
DKC 33-37RIB (BAYER C.S)	8.46	70.61	110.2	98.3	98.3
PS 2210VT2P RIB (PICKSEE-	7.77	74.23	101.3	103.3	100.1
PS 2321VT2P (PICKSEED) +	7.70	72.02	100.3	100.3	97.4
PS 2333RR (PICKSEED) +	8.15	71.22	106.2	99.1	99.1
PS 25062VT2P RIB (PICKSE	8.71	70.55	113.5	98.2	98.2
P8234AM (CORTEVA) +	8.04	72.28	104.8	100.6	100.6
P7955AM (CORTEVA)	8.16	74.28	106.4	103.4	103.4
P7861AM (CORTEVA)	8.14	72.05	106.1	100.3	100.3
P7940ASM (CORTEVA)	7.45	72.68	97.1	101.2	95.5
A4939G2 RIB (PRIDE)	7.99	73.42	104.2	102.2	101.7
A3993G2 RIB (PRIDE) -	7.36	76.88	95.9	107.0	95.9
A4646G2 RIB (PRIDE) -	7.89	74.82	102.8	104.1	101.8
A4323G2 RIB (PRIDE)	7.50	75.61	97.7	105.3	97.7
A4414RR (PRIDE)	6.80	74.81	88.7	104.1	88.7
E44H12 R (MAIZEX)	7.97	74.67	103.8	103.9	102.5
MZ 1688DBR (MAIZEX)	8.03	74.12	104.7	103.2	102.7

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).

## CUMULATIVE PERFORMANCE - GRAIN TRIALS 2020

Cumulative performance data for all hybrids tested in the 2020 Grain Trials, locations and prior year's testing combined.

Hybrid Identification	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index	# Site X Years Tested
A3993G2 RIB (PRIDE) -	8.71	23.1	5.4	90.7	95.9	15
A4323G2 RIB (PRIDE)	8.87	24.4	8.9	90.2	97.7	5
DKC 21-36RIB (BAYER C.S)	9.16	24.8	1.9	89.2	100.6	5
DKC24-06RIB (BAYER C.S.)	9.77	25.0	9.0	93.7	104.4	5
A4646G2 RIB (PRIDE) -	9.33	25.2	4.6	87.4	101.8	15
A4414RR (PRIDE)	8.05	25.2	8.2	87.8	88.7	5
E44H12 R (MAIZEX)	9.42	25.3	5.6	94.6	102.5	10
DKC 26-40RIB (BAYER C.S)	9.11	25.6	5.4	87.0	99.5	10
B78R96AM (CORTEVA)	9.04	25.6	9.4	91.1	98.9	10
P7955AM (CORTEVA)	9.65	25.7	9.3	93.5	103.4	10
PS 2210VT2P RIB (PICKSEE-	9.19	25.8	4.9	92.0	100.1	15
MZ 1688DBR (MAIZEX)	9.50	25.9	4.8	90.7	102.7	10
EXP77-20 (BAYER C.S.)	10.67	26.3	6.1	91.6	102.6	5
E49K32 R (MAIZEX)	10.29	26.5	4.7	91.3	102.3	15
A4939G2 RIB (PRIDE)	9.46	26.6	7.3	90.8	101.7	15
P7940ASM (CORTEVA)	8.81	27.3	10.6	86.6	95.5	10
NK7837-3220 (SYNGENTA)	8.77	27.6	6.0	91.6	94.9	5
P8234AM (CORTEVA) +	9.52	27.7	5.3	91.2	100.6	15
P7861AM (CORTEVA)	9.63	27.9	5.2	88.6	100.3	10
PS 2321VT2P (PICKSEED) +	9.10	28.0	16.7	87.2	97.4	15
PS 2333RR (PICKSEED) +	9.64	28.8	9.8	89.7	99.1	15
NK8005-3220 (SYNGENTA)	8.91	28.9	11.0	89.3	94.9	5
DKC 33-37RIB (BAYER C.S)	10.00	29.4	3.0	92.2	98.3	5
PS 25062VT2P RIB (PICKSE	10.31	29.4	7.5	93.5	98.2	5
B82R52AM (CORTEVA)	9.75	30.3	5.3	85.3	97.1	10
NK8204-3220 (SYNGENTA)	9.18	30.4	3.1	86.8	96.0	5

Notes: Early Standard Hybrids indicated by a '-'; Late Standards by a '+'.  
Emergence recorded before thinning to 36 plants per 6.5 meter row.

**2020 SUMMARY OF TEST WEIGHTS FROM EACH TEST LOCATION**

	Truro	Kentville	Charlottetown	Sussex	Knightville
A3993G2 RIB (PRIDE)	344.03	364.50	376.03	366.40	370.67
A4414RR (PRIDE)	342.63	367.90	371.03	373.77	367.40
A4646G2 RIB (PRIDE)	325.07	354.60	350.83	346.37	346.27
A4939G2 RIB(PRIDE)	307.83	338.90	344.70	345.67	340.93
B78R96AM (CORTEVA)	308.50	339.30	330.33	339.63	330.90
B82R52AM (CORTEVA)	308.20	341.10	339.13	319.83	329.93
DKC 21-36RIB (BAYER C.S.)	325.10	357.90	362.33	355.40	364.23
DKC 26-40RIB (BAYER C.S.)	346.23	370.20	375.20	375.97	369.17
DKC 33-37RIB (BAYER C.S.)	317.10	350.40	340.03	343.10	336.30
DKC24-06RIB(BAYER C.S.)	326.17	355.60	364.43	364.23	365.27
E44H12 R (MAIZEX)	344.47	365.90	374.90	366.50	368.33
E49K32 R (MAIZEX)	319.33	354.90	341.27	346.82	356.60
EXP77-20 (BAYER C.S.)	316.23	356.50	342.83	342.80	344.23
MZ 1688DBR (MAIZEX)	321.80	348.80	355.10	347.43	343.80
NK7837-3220 (SYNGENTA)	326.20	356.20	365.63	359.80	362.40
NK8005-3220 (SYNGENTA)	339.53	341.10	352.70	344.10	341.03
NK8204-3220 (SYNGENTA)	312.30	346.30	333.63	335.97	323.57
P7861AM (CORTEVA)	324.83	347.00	344.17	346.53	340.33
P7940ASM (CORTEVA)	319.40	353.20	352.20	350.37	352.33
P7955AM (CORTEVA)	329.23	351.50	357.47	356.90	358.40
P8234AM (CORTEVA)	315.43	345.70	334.23	344.57	331.33
PS 2210VT2P RIB(PICKSEED)	323.53	342.50	352.33	349.12	355.20
PS 2321VT2P (PICKSEED)	334.87	346.90	353.57	342.67	332.27
PS 2333RR(PICKSEED)	342.00	364.00	362.77	349.33	360.03
PS 25062VT2P RIB(PICKSEED)	306.43	347.30	337.07	345.47	331.90
A4323G2 RIB (PRIDE)	341.90	368.70	367.93	369.90	367.80
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LSD(5%)	14.35	12.2	7.029	8.041	10.042
Grand Mean	325.71	352.95	353.15	351.1	349.64
C.V.	2.7	2.1	1.2	1.4	1.8
SEM	5.052	4.29	2.475	2.852	3.535

## 2020 PERFORMANCE DATA FOR CHARLOTTETOWN GRAIN TRIAL

AGENCY: AGRICULTURE AND AGRI-FOOD CANADA

GRAIN TRIAL LOCATION: HARRINGTON, P.E.I. (Near Charlottetown)

SEEDED: MAY 20, 2020

HARVESTED: OCTOBER 26, 2020

Hybrid Identification	Test Weight (g/0.5L)	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
A3993G2 RIB (PRIDE)	376.03	8.16	25.9	1.2	93.7	108.0
DKC 21-36RIB (BAYER C.S.)	362.33	9.67	28.2	1.1	96.1	106.1
E44H12 R (MAIZEX)	374.90	8.49	28.5	1.1	97.4	105.6
B78R96AM (CORTEVA)	330.33	9.17	29.2	1.3	91.0	104.8
A4414RR (PRIDE)	371.03	6.48	29.4	2.8	90.5	89.1
A4323G2 RIB (PRIDE)	367.93	5.40	29.5	8.3	95.8	74.3
MZ 1688DBR (MAIZEX)	355.10	9.06	30.1	6.9	95.8	103.3
PS 2210VT2P RIB (PICKSEED)	352.33	6.53	30.3	0.0	89.3	89.9
DKC 26-40RIB (BAYER C.S.)	375.20	7.22	30.4	0.0	97.5	98.1
NK7837-3220 (SYNGENTA)	365.63	9.52	30.5	1.6	94.1	102.9
P7940ASM (CORTEVA)	352.20	9.43	30.7	2.4	93.3	102.5
P7955AM (CORTEVA)	357.47	9.57	30.7	10.6	94.5	102.4
DKC24-06RIB (BAYER C.S.)	364.43	9.96	31.1	3.8	96.2	101.9
A4646G2 RIB (PRIDE)	350.83	7.10	31.4	0.0	86.7	96.3
NK8005-3220 (SYNGENTA)	352.70	9.75	31.4	19.6	95.6	101.4
P7861AM (CORTEVA)	344.17	9.56	31.6	1.7	93.9	101.2
PS 2321VT2P (PICKSEED)	353.57	7.47	31.7	1.1	84.6	97.2
A4939G2 RIB (PRIDE)	344.70	9.90	31.7	9.8	94.1	101.0
PS 2333RR (PICKSEED)	362.77	10.02	32.6	11.5	91.8	99.7
B82R52AM (CORTEVA)	339.13	10.69	32.9	5.6	97.5	99.3
P8234AM (CORTEVA)	334.23	7.98	32.9	7.4	92.2	97.3
EXP77-20 (BAYER C.S.)	342.83	8.68	32.9	2.2	92.9	99.2
E49K32 R (MAIZEX)	341.27	10.20	33.1	2.9	95.3	98.9
DKC 33-37RIB (BAYER C.S.)	340.03	9.15	34.8	0.0	92.6	96.5
PS 25062VT2P RIB (PICKSEED)	337.07	10.88	35.2	1.1	95.3	95.8
NK8204-3220 (SYNGENTA)	333.63	10.13	36.7	1.8	89.5	93.6
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LSD (5%)	7.029	1.288	1.16	10.20	8.72	
Grand Mean	353.15	8.853	31.29	4.04	93.35	
C.V.	1.2	8.854	2.25	153.88	5.69	
SEM	2.475	0.453	0.41	3.59	3.07	



## 2020 PERFORMANCE DATA FOR KENTVILLE GRAIN TRIAL

AGENCY: PERENNIA FOOD AND AGRICULTURE LTD.

GRAIN TRIAL LOCATION: Somerset, NS (near KENTVILLE)

SEEDED: MAY 18, 2020

HARVESTED: October 27, 2020

Hybrid Identification	Test Weight (g/0.5L)	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
A3993G2 RIB (PRIDE)	364.5	7.62	11.0	5.5	*	83.9
DKC24-06RIB (BAYER C.S.)	355.6	9.10	11.1	19.4	*	100.2
A4646G2 RIB (PRIDE)	354.6	9.32	11.4	13.6	*	102.5
DKC 21-36RIB (BAYER C.S.)	357.9	9.10	11.5	6.6	*	100.2
MZ 1688DBR (MAIZEX)	348.8	10.29	11.6	13.2	*	104.6
A4414RR (PRIDE)	367.9	7.92	11.6	14.4	*	87.2
A4323G2 RIB (PRIDE)	368.7	9.54	12.0	14.6	*	104.0
E49K32 R (MAIZEX)	354.9	10.69	12.1	19.5	*	103.9
PS 2210VT2P RIB (PICKSEED)	342.5	10.30	12.2	2.6	*	103.8
B78R96AM (CORTEVA)	339.3	7.62	12.5	15.2	*	83.9
DKC 26-40RIB (BAYER C.S.)	370.2	8.59	13.0	8.9	*	94.4
EXP77-20 (BAYER C.S.)	356.5	10.70	13.2	17.1	*	102.6
P7955AM (CORTEVA)	351.5	7.74	13.2	13.6	*	85.2
PS 25062VT2P RIB (PICKSEED)	347.3	10.55	13.2	20.0	*	102.6
P8234AM (CORTEVA)	345.7	9.74	13.5	1.1	*	102.2
E44H12 R (MAIZEX)	365.9	6.73	13.6	13.8	*	74.1
DKC 33-37RIB (BAYER C.S.)	350.4	9.81	13.7	8.9	*	102.0
NK7837-3220 (SYNGENTA)	356.2	7.26	13.8	0.0	*	80.0
P7940ASM (CORTEVA)	353.2	8.39	13.9	14.9	*	91.8
P7861AM (CORTEVA)	347.0	9.09	14.1	9.8	*	98.9
A4939G2 RIB (PRIDE)	338.9	9.45	14.5	20.9	*	101.1
NK8204-3220 (SYNGENTA)	346.3	8.85	15.8	0.0	*	95.7
PS 2333RR (PICKSEED)	364.0	10.04	16.1	2.9	*	99.2
B82R52AM (CORTEVA)	341.1	9.71	16.5	13.3	*	98.7
PS 2321VT2P (PICKSEED)	346.9	8.00	16.7	20.7	*	86.6
NK8005-3220 (SYNGENTA)	341.1	8.82	16.9	13.8	*	94.9
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LSD (5%)	12.20	1.690	2.46	15.62	*	
Grand Mean	352.95	9.038	13.41	12.00	*	
C.V.	2.1	8.391	11.16	79.30	*	
SEM	4.29	0.594	0.86	5.49	*	

## 2020 PERFORMANCE DATA FOR SUSSEX GRAIN TRIAL

**AGENCY:** NEW BRUNSWICK SOIL & CROP IMPROVEMENT ASSOCIATION

NEW BRUNSWICK DEPARTMENT of AGRICULTURE & AQUACULTURE AND FISHERIES

**GRAIN TRIAL LOCATION:** KNIGHTVILLE, NB (near SUSSEX)

**SEEDED:** MAY 21, 2020

**HARVESTED:** OCTOBER 1, 2020

Hybrid Identification	Test Weight (g/0.5L)	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
A4323G2 RIB (PRIDE)	369.90	10.01	24.5	32.1	71.2	109.1
DKC24-06RIB (BAYER C.S.)	364.23	8.74	24.6	23.5	85.0	104.3
A3993G2 RIB (PRIDE)	366.4	7.75	25.1	26.2	63.9	92.5
B78R96AM (CORTEVA)	339.63	9.38	25.7	22.8	73.4	107.3
DKC 21-36RIB (BAYER C.S.)	355.40	7.28	26.3	24.8	65.2	87.0
A4414RR (PRIDE)	373.77	7.97	26.4	13.1	71.2	95.1
MZ 1688DBR (MAIZEX)	347.43	8.94	26.6	31.8	80.1	104.4
E44H12 R (MAIZEX)	366.50	7.97	26.6	19.5	80.5	95.1
EXP77-20 (BAYER C.S.)	342.80	11.17	26.8	2.6	79.5	105.7
A4646G2 RIB (PRIDE)	346.37	9.07	27.5	0.8	67.5	104.1
DKC 26-40RIB (BAYER C.S.)	375.97	8.78	27.8	6.2	72.3	102.0
A4939G2 RIB (PRIDE)	345.67	9.27	28.3	15.6	77.6	103.5
P7955AM (CORTEVA)	356.90	8.42	28.5	27.7	76.2	99.0
E49K32 R (MAIZEX)	346.82	9.50	28.9	3.7	69.0	102.7
NK7837-3220 (SYNGENTA)	359.80	8.22	29.1	16.3	81.6	97.0
PS 2210VT2P RIB (PICKSEED)	349.12	8.31	29.6	2.7	74.4	96.8
P8234AM (CORTEVA)	344.57	9.04	29.9	2.2	78.2	100.8
P7940ASM (CORTEVA)	350.37	8.76	30.3	9.5	75.4	98.7
PS 2321VT2P (PICKSEED)	342.67	9.17	30.9	*	74.9	99.8
P7861AM (CORTEVA)	346.53	9.87	31.3	2.7	83.2	99.1
PS 2333RR (PICKSEED)	349.33	9.00	31.4	5.9	71.6	98.8
NK8005-3220 (SYNGENTA)	344.10	6.96	32.9	8.0	70.1	83.1
DKC 33-37RIB (BAYER C.S.)	343.10	9.24	32.9	0.0	82.2	96.9
PS 25062VT2P RIB (PICKSEED)	345.47	9.94	33.0	5.4	83.9	96.7
NK8204-3220 (SYNGENTA)	335.97	8.00	33.9	4.8	69.4	89.6
B82R52AM (CORTEVA)	319.83	9.62	35.3	7.3	68.1	93.5
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LSD(5%)	8.041	1.654	2.71	11.47	13.22	
Grand Mean	351.10	8.860	29.00	12.59	74.83	
C.V.	1.4	11.371	5.70	55.16	10.76	
SEM	2.852	0.582	0.95	4.01	4.65	

## 2020 PERFORMANCE DATA FOR WILLIAMSTOWN GRAIN TRIAL

**AGENCY:** NEW BRUNSWICK SOIL & CROP IMPROVEMENT ASSOCIATION

NEW BRUNSWICK DEPARTMENT of AGRICULTURE & AQUACULTURE AND FISHERIES

**GRAIN TRIAL LOCATION:** Williamstown, NB

**SEEDED:** MAY 24, 2020

**HARVESTED:** OCTOBER 5, 2020

Hybrid Identification	Test Weight (g/0.5L)	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
A3993G2 RIB (PRIDE)	370.67	10.84	18.6	*	93.9	92.6
A4323G2 RIB (PRIDE)	367.80	10.44	19.6	*	96.5	89.2
E44H12 R (MAIZEX)	368.33	11.55	20.4	*	96.5	98.7
A4646G2 RIB (PRIDE)	346.27	11.89	20.4	*	94.4	101.6
DKC24-06RIB (BAYER C.S.)	365.27	12.16	20.5	*	96.0	103.9
DKC 26-40RIB (BAYER C.S.)	369.17	11.21	20.5	*	96.5	95.8
PS 2210VT2P RIB (PICKSEED)	355.20	12.43	20.6	*	96.0	104.2
E49K32 R (MAIZEX)	356.60	13.96	21.1	*	98.0	103.5
B78R96AM (CORTEVA)	330.90	11.13	21.4	*	92.4	95.1
DKC 21-36RIB (BAYER C.S.)	364.23	12.24	21.4	*	98.0	103.2
EXP77-20 (BAYER C.S.)	344.23	12.80	21.5	*	96.5	103.0
A4939G2 RIB (PRIDE)	340.93	12.24	21.6	*	94.4	102.9
P7940ASM (CORTEVA)	352.33	10.94	21.8	*	96.5	93.5
P8234AM (CORTEVA)	331.33	11.90	21.9	*	95.5	101.7
A4414RR (PRIDE)	367.40	10.31	22.1	*	91.9	88.1
P7955AM (CORTEVA)	358.40	11.73	22.3	*	97.5	100.2
P7861AM (CORTEVA)	340.33	12.37	22.8	*	97.5	101.3
NK7837-3220 (SYNGENTA)	362.40	11.38	23.9	*	93.4	97.2
MZ 1688DBR (MAIZEX)	343.80	11.15	24.0	*	93.4	95.3
PS 2333RR (PICKSEED)	360.03	11.74	24.0	*	91.9	99.8
PS 25062VT2P RIB (PICKSEED)	331.90	12.10	25.2	*	97.5	98.1
DKC 33-37RIB (BAYER C.S.)	336.30	11.94	25.5	*	96.5	97.8
PS 2321VT2P (PICKSEED)	332.27	11.42	25.6	*	87.4	97.6
NK8005-3220 (SYNGENTA)	341.03	10.70	26.7	*	93.9	91.5
NK8204-3220 (SYNGENTA)	323.57	10.45	29.1	*	90.9	89.3
B82R52AM (CORTEVA)	329.93	11.83	29.2	*	96.0	93.0
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LSD (5%)	10.042	1.103	1.96	*	5.11	
Grand Mean	349.64	11.648	22.75	*	94.95	
C.V.	1.8	5.770	5.24	*	3.28	
SEM	3.535	0.388	0.69	*	1.80	

## 2020 PERFORMANCE DATA FOR TRURO GRAIN TRIAL

AGENCY: PERENNIA FOOD AND AGRICULTURE LTD.

GRAIN TRIAL LOCATION: MASSTOWN, NS (near TRURO)

SEEDED: MAY 22, 2020

HARVESTED: OCTOBER 26, 2020

Hybrid Identification	Yield @15.5% Moist. (t/ha)	Grain Moist. Content (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
PS 2210VT2P RIB (PICKSEED)	9.40	16.2	1.1	100.0	97.3
E49K32 R (MAIZEX)	11.26	16.8	0.0	100.0	107.4
A4646G2 RIB (PRIDE)	10.30	17.0	0.0	100.0	104.6
A3993G2 RIB (PRIDE)	9.27	17.7	0.0	100.0	96.0
MZ 1688DBR (MAIZEX)	10.01	18.1	0.0	100.0	101.5
E44H12 R (MAIZEX)	10.13	18.5	0.0	100.0	102.0
DKC 26-40RIB (BAYER C.S.)	10.15	18.5	0.0	100.0	102.1
A4939G2 RIB (PRIDE)	10.12	19.0	1.0	100.0	101.4
NK8204-3220 (SYNGENTA)	10.05	19.2	1.7	100.0	100.7
XP20076G2 (PRIDE)	10.54	19.2	0.0	100.0	104.2
A4414RR (PRIDE)	9.16	19.3	0.0	100.0	94.3
DKC 21-36RIB (BAYER C.S.)	9.06	19.3	0.0	100.0	93.5
NK8005-3220 (SYNGENTA)	9.88	19.4	0.0	100.0	99.3
EXP77-20 (BAYER C.S.)	11.55	20.1	0.0	100.0	103.1
DKC24-06RIB (BAYER C.S.)	10.47	20.4	0.0	100.0	102.6
P7955AM (CORTEVA)	11.04	20.5	0.0	100.0	102.5
B78R96AM (CORTEVA)	8.89	20.7	1.7	100.0	91.0
P7940ASM (CORTEVA)	8.82	21.3	0.0	100.0	89.9
P8234AM (CORTEVA)	10.76	21.5	0.0	100.0	101.2
PS 2333RR (PICKSEED)	11.08	22.0	1.1	100.0	100.7
P7861AM (CORTEVA)	10.58	22.6	0.0	100.0	99.9
DKC 33-37RIB (BAYER C.S.)	11.47	22.9	0.0	100.0	99.5
NK7837-3220 (SYNGENTA)	9.06	23.5	0.0	100.0	89.6
PS 25062VT2P RIB (PICKSEED)	9.64	23.5	0.9	100.0	93.8
PS 2321VT2P (PICKSEED)	9.28	24.0	0.0	100.0	90.8
B82R52AM (CORTEVA)	10.36	26.9	0.0	100.0	94.3

LSD(5%)	1.364	2.74	1.72	0.01
Grand Mean	10.089	20.31	0.31	100.00
C.V.	8.228	8.22	338.88	0.01
SEM	0.479	0.96	0.61	0.00

**RELATIVE PERFORMANCE OF THE SILAGE HYBRIDS TO THE MEANS OF THE STANDARD HYBRIDS 2020**

RELATIVE PERFORMANCE OF THE SILAGE HYBRIDS TO THE MEANS OF THE STANDARD HYBRIDS - 2020

Hybrid whole-plant yields and percent dry matter levels, the yield of each hybrid relative to the mean yield of the 3 early standard hybrids (17.13 t/ha), the whole-plant % DM of each hybrid relative to the mean of the 3 late standard hybrids (34.75%), and the hybrid's Performance Index Value.

HYBRID	Dry Matter Yield (t/ha)	Whole-Plant % Dry Matter	Yield Relative to Early Standards	% DM Relative to Late Standards	Performance Index
B78R96AM (CORTEVA)	14.89	37.27	86.9	107.3	86.9
B82R52AM (CORTEVA)	17.26	34.83	100.7	100.2	97.7
NK8204-3220 (SYNGENTA)	15.70	31.73	91.7	91.3	85.1
E52V92 R (MAIZEX)	16.21	33.79	94.6	97.2	91.2
DKC 32-12RIB (BAYER C.S+)	17.77	34.71	103.7	99.9	99.8
DKC 31-85PRIB (BAYER C.S)	17.32	35.21	101.1	101.3	98.8
PS 2210VT2P RIB (PICKSEE-	16.65	36.09	97.2	103.9	97.2
PS 2321VT2P (PICKSEED) -	18.16	35.43	106.0	102.0	102.0
PS 2333RR (PICKSEED)	18.06	35.00	105.4	100.7	100.7
P7527AM (CORTEVA) -	16.59	37.38	96.8	107.6	96.8
P8234AM (CORTEVA)	17.36	35.00	101.3	100.7	98.5
P7861AM (CORTEVA)	16.76	36.51	97.8	105.1	97.8
A4939G2 RIB (PRIDE) +	17.32	35.37	101.1	101.8	99.1
A4705HMRR (PRIDE) +	18.31	34.16	106.9	98.3	98.3
AS1017RR EDF (PRIDE)	18.49	37.12	107.9	106.8	106.8
AS1027RR EDF (PRIDE)	19.74	36.20	115.2	104.2	104.2
A4323G2 RIB (PRIDE)	16.54	36.43	96.6	104.8	96.6
MS 7420R (MAIZEX)	17.58	36.05	102.6	103.7	101.5
MS 7733DBR (MAIZEX)	17.75	35.21	103.6	101.3	100.6
MS 8022R (MAIZEX)	19.63	34.57	114.6	99.5	99.5

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).

## CUMULATIVE PERFORMANCE - SILAGE TRIALS- 2020

Cumulative performance data for all hybrids tested in the 2017 Silage Trials which includes the current year's and all prior year's testing results. All hybrids showing just 5 site years of testing were new entries in 2020.

HYBRID		Dry Matter Yield (t/ha)	Whole- Plant % Dry Matter	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index	# of Sites X Years Tested
P7527AM (CORTEVA)	-	16.59	37.4	0.0	91.8	96.8	19
B78R96AM (CORTEVA)		14.89	37.3	0.5	91.3	86.9	10
AS1017RR EDF (PRIDE)		18.49	37.1	1.9	90.0	106.8	15
P7861AM (CORTEVA)		16.76	36.5	0.3	85.8	97.8	10
A4323G2 RIB (PRIDE)		16.54	36.4	0.7	90.9	96.6	5
AS1027RR EDF (PRIDE)		19.74	36.2	2.0	91.4	104.2	15
PS 2210VT2P RIB (PICKSEE-		16.65	36.1	0.3	93.7	97.2	29
MS 7420R (MAIZEX)		17.58	36.0	1.3	90.9	101.5	14
PS 2321VT2P (PICKSEED)	-	18.16	35.4	2.9	89.4	102.0	24
A4939G2 RIB (PRIDE)	+	17.32	35.4	0.1	92.4	99.1	34
DKC 31-85PRIB (BAYER C.S		17.32	35.2	0.5	90.6	98.8	5
MS 7733DBR (MAIZEX)		17.75	35.2	0.5	93.6	100.6	5
PS 2333RR (PICKSEED)		18.06	35.0	1.4	90.9	100.7	19
P8234AM (CORTEVA)		17.36	35.0	0.2	90.2	98.5	19
B82R52AM (CORTEVA)		17.26	34.8	0.5	89.9	97.7	10
DKC 32-12RIB (BAYER C.S+		17.77	34.7	0.0	94.9	99.8	24
MS 8022R (MAIZEX)		19.63	34.6	0.7	91.6	99.5	5
A4705HMRR (PRIDE)	+	18.31	34.2	1.2	87.1	98.3	15
E52V92 R (MAIZEX)		16.21	33.8	0.7	92.0	91.2	5
NK8204-3220 (SYNGENTA)		15.70	31.7	0.3	86.4	85.1	5

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
Emergence recorded before thinning to 36 plants per 6.5 meter row.  
Silage & grain plots are thinned to a plant population of 30,000/acre.

## 2020 PERFORMANCE DATA FOR CHARLOTTETOWN SILAGE TRIAL

**AGENCY:** AGRICULTURE AND AGRI-FOOD CANADA, CHARLOTTETOWN, P.E.I.

**SILAGE TRIAL LOCATION:** HARRINGTON, P.E.I. (near Charlottetown)

**SEEDED:** MAY 30, 2020

**HARVESTED:** SEPTEMBER 29, 2020

Hybrid Identification	Yield Whole Plant Dry Matter (t/ha)	Silage Dry Matter (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
B78R96AM (CORTEVA)	13.16	36.7	0.0	94.1	95.8
AS1017RR EDF (PRIDE)	14.56	36.0	4.7	93.4	106.0
P7527AM (CORTEVA)	13.30	36.0	0.0	94.5	96.9
P7861AM (CORTEVA)	13.10	35.2	0.0	95.9	95.4
AS1027RR EDF (PRIDE)	14.89	35.0	2.8	92.1	104.7
DKC 32-12RIB (BAYER C.S.)	14.73	35.0	0.0	90.3	104.6
B82R52AM (CORTEVA)	14.18	34.8	2.8	93.7	103.0
PS 2210VT2P RIB (PICKSEED)	13.55	34.6	0.0	95.2	98.7
XP20076G2 (PRIDE)	11.80	34.5	1.9	85.5	86.0
PS 2321VT2P (PICKSEED)	14.34	33.0	0.0	81.5	98.7
MS 8022R (MAIZEX)	14.83	33.0	1.9	97.2	98.6
A4939G2 RIB (PRIDE)	13.54	32.8	0.0	93.2	95.6
MS 7733DBR (MAIZEX)	13.72	32.7	0.9	93.2	96.3
E52V92 R (MAIZEX)	12.86	32.6	0.9	94.0	91.5
A4705HMRR (PRIDE)	14.05	32.6	4.6	88.2	97.3
DKC 31-85PRIB (BAYER C.S.)	13.00	32.5	0.9	95.3	92.0
P8234AM (CORTEVA)	12.77	32.5	0.0	92.5	90.7
PS 2333RR (PICKSEED)	13.10	31.9	7.4	90.4	91.4
MS 7420R (MAIZEX)	13.25	31.8	4.6	93.1	92.1
NK8204-3220 (SYNGENTA)	13.69	31.0	0.0	90.8	92.7
LSD (5%)	1.111	1.44	3.48	7.51	
Grand Mean	13.682	33.91	1.59	92.34	
C.V.	4.912	2.57	131.90	4.92	
SEM	0.388	0.50	1.21	2.62	

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
Emergence recorded before thinning to 36 plants per 6.5 meter row.  
Silage & grain plots are thinned to a plant population of 30,000/acre.

## 2020 PERFORMANCE DATA FOR TRURO SILAGE TRIAL

AGENCY: PERENNIA FOOD AND AGRICULTURE LTD.

SILAGE TRIAL LOCATION: MASSTOWN, NS (near TRURO)

SEEDED: MAY 22, 2020

HARVESTED: SEPTEMBER 16, 2020

Hybrid Identification	Yield Whole Plant Dry Matter (t/ha)	Silage Dry Matter (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
AS1017RR EDF (PRIDE)	22.34	39.5	0.0	*	108.6
AS1027RR EDF (PRIDE)	23.55	37.9	0.0	*	104.3
XP20076G2 (PRIDE)	19.28	37.9	0.0	*	97.8
P7527AM (CORTEVA)	19.45	37.7	0.0	*	98.7
A4705HMRR (PRIDE)	22.00	37.7	0.0	*	103.6
DKC 31-85PRIB (BAYER C.S.)	19.60	37.4	0.0	*	99.5
PS 2321VT2P (PICKSEED)	21.64	37.4	0.0	*	102.9
B78R96AM (CORTEVA)	17.73	37.4	0.0	*	90.0
A4939G2 RIB (PRIDE)	20.87	37.3	0.0	*	102.5
P7861AM (CORTEVA)	17.91	37.0	0.9	*	90.9
B82R52AM (CORTEVA)	20.06	36.6	0.0	*	100.6
MS 7733DBR (MAIZEX)	21.20	36.5	0.0	*	100.4
P8234AM (CORTEVA)	18.92	36.3	0.0	*	96.0
PS 2333RR (PICKSEED)	21.85	35.8	1.0	*	98.4
MS 8022R (MAIZEX)	22.78	35.5	0.0	*	97.7
MS 7420R (MAIZEX)	17.66	34.8	1.0	*	89.6
DKC 32-12RIB (BAYER C.S.)	20.53	34.7	0.0	*	95.5
E52V92 R (MAIZEX)	18.27	33.7	1.0	*	92.6
PS 2210VT2P RIB (PICKSEED)	18.02	33.4	0.0	*	91.5
NK8204-3220 (SYNGENTA)	16.14	32.8	0.0	*	81.9
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LSD(5%)	1.775	3.93	1.23	*	
Grand Mean	19.846	36.38	0.19	*	
C.V.	7.594	6.54	392.11	*	
SEM	1.214	1.37	0.43	*	

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
 Emergence recorded before thinning to 36 plants per 6.5 meter row.  
 Silage & grain plots are thinned to a plant population of 30,000/acre.



## 2020 PERFORMANCE DATA FOR KENTVILLE SILAGE TRIAL

AGENCY: PERENNIA FOOD AND AGRICULTURE LTD.

SILAGE TRIAL LOCATION: Woodville, NS (near KENTVILLE)

SEEDED: MAY 18, 2020

HARVESTED: SEPTEMBER 15, 2020

Hybrid Identification	Yield Whole Plant Dry Matter (t/ha)	Silage Dry Matter (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
AS1027RR EDF (PRIDE)	21.16	42.5	0.0	*	110.4
AS1017RR EDF (PRIDE)	17.89	42.4	0.0	*	110.2
A4939G2 RIB (PRIDE)	18.48	41.1	0.0	*	106.7
B78R96AM (CORTEVA)	12.39	40.8	0.0	*	78.0
MS 8022R (MAIZEX)	21.78	40.6	0.0	*	105.4
MS 7420R (MAIZEX)	17.43	39.9	0.0	*	103.7
P8234AM (CORTEVA)	18.07	39.8	0.0	*	103.4
E52V92 R (MAIZEX)	17.86	39.5	0.0	*	102.5
PS 2210VT2P RIB (PICKSEED)	16.31	39.3	0.0	*	102.1
DKC 32-12RIB (BAYER C.S.)	17.65	39.3	0.0	*	102.0
A4705HMRR (PRIDE)	19.17	39.0	1.0	*	101.2
P7861AM (CORTEVA)	18.13	38.9	0.0	*	101.1
PS 2333RR (PICKSEED)	18.36	38.9	0.0	*	101.0
MS 7733DBR (MAIZEX)	18.54	38.8	0.0	*	100.7
XP20076G2 (PRIDE)	16.08	38.6	0.0	*	100.2
DKC 31-85PRIB (BAYER C.S.)	17.62	38.5	0.0	*	100.0
P7527AM (CORTEVA)	14.63	38.4	0.0	*	92.1
B82R52AM (CORTEVA)	17.09	35.7	0.0	*	92.7
NK8204-3220 (SYNGENTA)	15.70	34.1	0.0	*	88.5
PS 2321VT2P (PICKSEED)	16.72	34.0	0.0	*	88.3
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LSD(5%)	1.560	4.41	0.89	*	
Grand Mean	17.348	38.98	0.10	*	
C.V.	7.021	6.85	531.63	*	
SEM	1.104	1.54	0.31	*	

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
 Emergence recorded before thinning to 36 plants per 6.5 meter row.  
 Silage & grain plots are thinned to a plant population of 30,000/acre.

## 2020 PERFORMANCE DATA FOR SUSSEX SILAGE TRIAL

**AGENCY:** NEW BRUNSWICK SOIL & CROP IMPROVEMENT ASSOCIATION

NEW BRUNSWICK DEPARTMENT of AGRICULTURE & AQUACULTURE AND FISHERIES

**SILAGE TRIAL LOCATION:** KNIGHTVILLE, NB (NEAR SUSSEX)

**SEEDED:** MAY 21, 2020

**HARVESTED:** OCTOBER 1, 2020

Hybrid Identification	Yield Whole Plant Dry Matter (t/ha)	Silage Dry Matter (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
AS1017RR EDF (PRIDE)	19.95	48.2	0.8	72.7	123.5
MS 7420R (MAIZEX)	17.34	44.2	1.0	73.7	109.3
P7527AM (CORTEVA)	15.71	43.6	0.0	67.7	99.0
MS 7733DBR (MAIZEX)	17.39	42.7	0.0	80.3	108.3
AS1027RR EDF (PRIDE)	18.92	42.5	0.7	82.3	108.9
XP20076G2 (PRIDE)	17.51	42.1	0.0	82.3	106.9
P7861AM (CORTEVA)	18.12	40.6	0.0	69.7	103.6
B78R96AM (CORTEVA)	15.12	40.5	0.0	75.8	95.3
A4705HMRR (PRIDE)	19.98	39.6	0.0	77.3	101.5
DKC 32-12RIB (BAYER C.S.)	18.09	39.1	0.0	79.3	99.8
PS 2321VT2P (PICKSEED)	16.55	39.0	0.8	72.2	98.3
DKC 31-85PRIB (BAYER C.S.)	17.19	38.9	0.0	76.3	98.4
B82R52AM (CORTEVA)	18.16	38.7	0.0	82.3	98.9
PS 2333RR (PICKSEED)	16.88	38.5	1.0	74.7	97.2
P8234AM (CORTEVA)	17.24	38.4	0.0	87.9	97.2
A4939G2 RIB (PRIDE)	17.86	38.4	0.0	69.2	97.7
MS 8022R (MAIZEX)	18.34	38.3	0.0	72.2	97.9
NK8204-3220 (SYNGENTA)	15.22	37.2	0.0	67.2	92.5
PS 2210VT2P RIB (PICKSEED)	15.34	37.2	0.0	85.4	92.6
E52V92 R (MAIZEX)	14.47	36.1	0.0	80.3	89.1
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LSD(5%)	2.033	6.54	1.16	15.98	
Grand Mean	17.172	40.44	0.22	76.43	
C.V.	10.182	9.77	317.21	12.65	
SEM	1.406	2.28	0.41	5.58	

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
Emergence recorded before thinning to 36 plants per 6.5 meter row.  
Silage & grain plots are thinned to a plant population of 30,000/acre.

## 2020 PERFORMANCE DATA FOR WILLIAMSTOWN SILAGE TRIAL

**AGENCY:** NEW BRUNSWICK SOIL & CROP IMPROVEMENT ASSOCIATION

NEW BRUNSWICK DEPARTMENT of AGRICULTURE & AQUACULTURE AND FISHERIES

**SILAGE TRIAL LOCATION:** WILLIAMSTOWN, NB)

**SEEDED:** MAY 26, 2020

**HARVESTED:** OCTOBER 5, 2020

Hybrid Identification	Yield Whole Plant Dry Matter (t/ha)	Silage Dry Matter (%)	Stalk Break- age (%)	Emerg- ence (%)	Perfor- mance Index
P7527AM (CORTEVA)	20.62	44.5	0.0	96.0	102.3
P7861AM (CORTEVA)	19.69	44.4	0.0	97.0	97.6
PS 2333RR (PICKSEED)	22.91	44.1	1.8	93.4	107.3
AS1017RR EDF (PRIDE)	22.37	43.9	0.9	90.9	106.7
XP20076G2 (PRIDE)	20.27	43.4	0.0	96.0	100.5
PS 2210VT2P RIB (PICKSEED)	20.23	43.4	0.0	94.4	100.3
DKC 31-85PRIB (BAYER C.S.)	21.42	43.1	0.0	91.4	104.5
DKC 32-12RIB (BAYER C.S.)	21.19	42.7	0.9	98.5	103.3
B78R96AM (CORTEVA)	17.61	42.7	0.0	90.9	87.3
B82R52AM (CORTEVA)	20.28	42.5	0.0	97.0	100.5
AS1027RR EDF (PRIDE)	24.55	42.1	0.9	95.5	102.4
P8234AM (CORTEVA)	21.06	42.0	0.0	90.4	101.4
A4939G2 RIB (PRIDE)	20.70	41.9	0.0	98.0	100.4
E52V92 R (MAIZEX)	19.83	41.4	0.0	92.9	97.2
MS 7420R (MAIZEX)	20.70	41.3	0.0	98.5	99.0
MS 8022R (MAIZEX)	22.62	39.8	0.0	96.5	96.9
MS 7733DBR (MAIZEX)	20.11	39.7	0.0	98.5	94.2
PS 2321VT2P (PICKSEED)	19.65	39.0	0.0	84.3	91.7
A4705HMRR (PRIDE)	21.99	38.7	0.0	91.4	94.1
NK8204-3220 (SYNGENTA)	19.99	37.9	0.0	92.4	90.1
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	LSD(5%)	1.762	2.35	1.61	6.60
	Grand Mean	20.759	42.04	0.26	94.26
	C.V.	5.135	3.38	368.99	4.23
	SEM	0.615	0.82	0.56	2.30

Notes: Early Standard Hybrids indicated by a (-); Late Standards by a (+).  
Emergence recorded before thinning to 36 plants per 6.5 meter row.  
Silage & grain plots are thinned to a plant population of 30,000/acre.