



# 2024

## Ontario Hybrid Corn Performance Trials

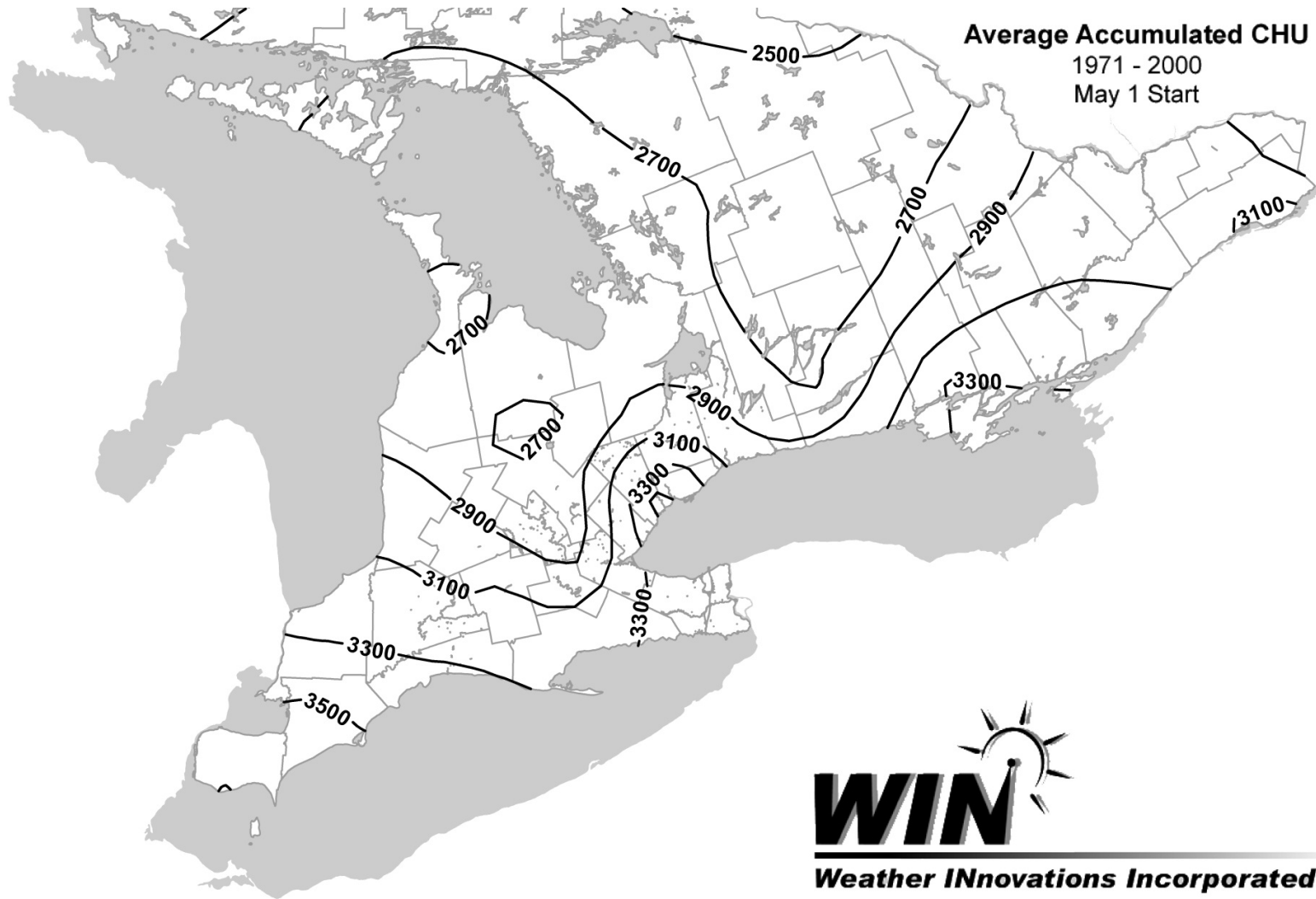
Data collected 2023-2024

Conducted by the Ontario Corn Committee • [www.GoCrops.ca](http://www.GoCrops.ca)

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PDF files of this report  
Sortable on-line tables  
Yield x Moisture Content

## Heat Units Available for Corn Production in Ontario



**Notes:** Corn Heat Unit ratings for all areas of the province are based on the average heat unit accumulation for the period from May 1 to the date in the fall when the long-term average daily temperature falls below 12°C or an occurrence of -2°C, whichever comes first.

## **ONTARIO CORN COMMITTEE**

The ONTARIO CORN COMMITTEE is made up of representatives of Agriculture and Agri-Food Canada, the Ontario Ministry of Agriculture, Food and Rural Affairs, the University of Guelph, the Ontario Soil and Crop Improvement Association, the Grain Farmers of Ontario and the Canadian Seed Trade Association. Hybrid Performance trials are conducted each year by the following cooperating agencies:

Ridgetown Campus, University of Guelph;  
Plant Agriculture Department, University of Guelph;  
Winchester Research Station, University of Guelph,  
Kent Ag Research Inc.,  
Agriculture and Agri-Food Canada at Ottawa.

### **TESTING METHODS**

Hybrids entered in the Hybrid Corn Performance Trials are selected by the seed companies. A testing fee is charged per hybrid per replication. A hybrid must be entered in all trials within a table.

In each trial, hybrids are replicated in a suitable experimental design. Trials are machine planted with an excess of seed and thinned at an early growth stage to obtain a uniform population. A row width of 30 inches is used in all trials. Plots consist of four rows of which the middle two rows are harvested for yield. Fertilizer rates may be higher than those recommended by OMAFRA to compensate for any variability in soil nutrient supply.

Most of the hybrids entered in the trials were treated with a seed treatment to control soil insects. Hybrids that were not treated with are not identified in the report. There was no significant damage from soil insects at any of the locations.

To determine the percentage of lodged plant, a count is made, immediately before harvest, of all plants broken below the ear and all plants which are leaning such that the ear is in the adjacent row or is otherwise unharvestable.

The moisture percentage of the grain is measured at harvest time. The weight of grain harvested from each plot is determined and the yield of shelled corn is calculated at 15% moisture. Test weights are recorded either during harvest, using combine-mounted monitoring equipment, or in the laboratory, using accepted procedures.

### **DUPLICATION OF THIS REPORT:**

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## INTERPRETATION OF RESULTS

**Index** - The index in the tables indicates a percent of the average of all hybrids included in the trial(s). Index figures above 100 reflect the percentage by which a hybrid is above the average, and index figures below 100 show the percent below average. Small differences in index (i.e. less than the LSD shown at the bottom of the table) are not significant. When a hybrid has a higher index over two years, this difference is probably real and should be considered when choosing a hybrid.

Hybrid selection should be based on the most data available. Greater emphasis should be put on averages from several locations and years because these provide a more accurate prediction of future performance than do single location results.

The average yield for each table is given in bushels per acre. You can calculate the actual yield for a hybrid by multiplying the average yield times its yield index and dividing by 100.

The average test weight is given in kg/hl (kilograms per hectoliter). You can calculate the actual test weight of a hybrid by multiplying the average test weight times its test weight index and dividing by 100.

Within each table, hybrids are identified by brand and/or hybrid number or name. Hybrids are listed in approximate order of maturity based on heat unit ratings provided by the companies.

**Corn Heat Units** - Ratings for all areas of the province are based on the average heat unit accumulation for the period from May 1 to the date in the fall when the long-term average daily temperature falls below 12° C or an occurrence of -2° C, whichever comes first. Hybrid heat unit ratings have been assigned by the sponsoring company.

**% Moisture** - The accuracy of moisture measurement decreases as moisture content increases. Results for hybrids with very high moisture contents should be interpreted with caution.

**% Lodging** - "Lodged Plants" includes plants with stalks that are broken below the ear and plants leaning such that the ear is in the adjacent row or otherwise unharvestable. Because all hybrids in a trial are harvested on

the same date, the early hybrids within each table tend to show a greater amount of stalk breakage than do later hybrids. Stalk strength should be compared only with hybrids of the same maturity.

**LSD (0.10)** - The LSD is a measure of variability within the trial. There is a ninety percent probability that yield indices that differ by an amount greater than the LSD are different. Yield indices that differ by an amount less than or equal to the LSD should be considered to be equal. For example, if the LSD is 10, two hybrids with yield indexes of 110 and 101 should be considered to be equal.

## Explanation of Codes for Special Genetic Traits

Code	GM Traits
0	Conventional Hybrid
4	Roundup Ready Corn 2
6	VT Double PRO
8	SmartStax
14	Agrisure GT
20	Agrisure Viptera 3111
24	Optimum AcreMax Xtreme
25	Optimum AcreMax Xtra
27	Viptera
28	Agrisure Above
30	PowerCore Enlist
31	SmartStax Enlist
32	Trecepta
33	Duracade
34	DuracadeViptera
36	Qrome
37	Optimum AcreMax Leptra
38	SmartStax PRO

### Notes:

The Ontario Corn Committee does not assess hybrids for Special Genetic Traits. Hybrid descriptions are based on information received from corn companies, as of November 2024. Although the Ontario Corn Committee believes the information contained in this report is accurate, growers are advised to consult dealers of the respective hybrids and products before making purchasing or management decisions. All hybrids included in this report have been fully approved for food and feed use in Canada and the United States. However, a number have not been approved for use in the European Union. Corn harvested from these non-EU approved hybrids must be delivered to a market that will not ship the grain or its processed products to Europe. For more information, contact your seed supplier.

Information regarding the genetic traits carried by all commercially available hybrids and their acceptability for export can also be obtained from the Seeds Canada's at: <https://seeds-canada.ca/corn-hybrid-database/>

## Explanation of Seed Treatment Codes

	Seed Treatments
-	No Treatment
A	Acceleron 250
C	Cruiser Maxx 250
F	Fortenza
L	Lumivia
P	Poncho 250
AD	Acceleron Standard Diamide

## Seed Corn Dealers

Brand or Identification	Company	Address of Canadian Sponsor	Telephone
CROPLAN	WinField United Canada	302 Wellman Lane #101, Saskatoon, SK S7T 0J1	306-249-5112
De Dell	De Dell Seeds Inc	7095 Century Drive, Melbourne, ON N0L 1T0	519-264-2676
DEKALB	DEKALB	2-679 Southgate Drive, Guelph, ON N1G 4S2	519-767-3366
DLF	DLF Canada Inc.	3043 County Road 2, Port Hope, ON L1A 3V5	1-705-878-9240
Horizon	Horizon Seeds Canada Inc.	729 Mid N. Walsingham Townline Rd, Courtland, ON N0J 1E0	519-842-5538
Maizex	Maizex Seeds Inc.	4488 Mint Line, Tilbury, ON N0P 2L0	877-682-1720
NK Brand	Syngenta Canada, Inc. (NK)	15910 Medway Rd., Arva, ON N0M 1C0	1-877-964-3682
Pioneer	Corteva Agriscience (Pioneer)	Suite 240, 115 Quarry Park Road SE, Calgary, AB T2C 5G9	1-800-265-9435
PRIDE Seeds	PRIDE Seeds	PO Box 1088, Chatham, ON N7M 5L6	1-800-265-5280
Saatbau	Saatbau Canada inc	201, rue St Louis, 412, St Jean sur Richelieu, QC J3B 1X9	514-609-0881

## 2024 Trial Locations and General Information - Ontario Hybrid Corn Performance Trials

Location:	See Table Number	Heat Unit Rating	5 Year Heat Unit Average <sup>1</sup>	2024 CHU Total <sup>2</sup>	Soil Type	Co-operator	Final plants per acre <sup>3</sup>	Date planted <sup>4</sup>	Date Harvested
Dundalk	1	2600	N/A	3177	Clay Loam	Blydorp Farms	36000	May 10	Nov 02
Harriston	1	2700	N/A	3177	Loam	Max VonWesterholt	36000	May 24	Nov 02
Kinburn	2	3000	N/A	3376	silt loam	Kinburn - Panmure Farms	34000	May 24	Nov 12
Wingham	2	2800	N/A	2959	Silt Loam	Rob Warwick	34000	May 22	Oct 21
Port Hope T2	2	2800	N/A	3503	Clay Loam	Bruce Hendry	36000	May 19	Nov 05
Elora	2	2800	N/A	3008	Silt Loam	University of Guelph	34000	May 07	Oct 22
Winchester	3E	3000	N/A	3230	clay loam	Ontario CRC - Winchester	34000	May 13	Oct 29
Ottawa	3E	3000	N/A	3119	Clay loam	AAFC-ORDC	31580	May 16	Nov 12
Bainsville	3E	3000	N/A	3448	Clay Loam	Rob McDonald	36000	May 19	Nov 09
Blyth	3W	3000	N/A	3037	Silt Loam	Peter Heinrich	34000	May 21	Oct 22
Port Hope	3W	3000	N/A	3503	Clay Loam	Bruce Hendry	36000	May 19	Nov 05
Waterloo	3W	2900	N/A	3543	Sandy laom	Snyder Acres Farms	34000	May 06	Oct 23
Ilderton	4	3100	N/A	3123	Silt Loam	Ralph Kuebler	34000	May 23	
Belmont	4	3250	N/A	3203	Loam	Mark Taylor	34000	May 24	Oct 28
Woodstock	4	3150	N/A	3531	Loam	Wes Hart	36000	May 16	Nov 06
Exeter	4	3050	N/A	3168	Silt Loam	Cliff Hicks	34000	May 24	Oct 24
Ridgetown	5	3450	N/A	3479	Loam	University of Guelph-Ridgetown	34000	May 14	Oct 29
Dresden	5	3600	N/A	3474	Sandy Loam	Brent McFadden	34000	May 15	Oct 29
Tilbury	5	3650	N/A	3642	Silt Loam	Gus Ternoey	34000	May 16	Oct 30

### Notes:

1 Average total heat unit accumulation 2019 - 2023, inclusive.

2 Total heat unit accumulation at location from day of planting to either occurrence of killing frost (-2 C) or 30-year average end-of-season date.

3 These populations may not be suitable for your farm.

4 All trials planted in 30 inch row widths.

**2024 Ontario Hybrid Corn Performance Trial Management Information**

Location	Table	Previous Crop	Tillage		Soil Test Ratings			Fertilizer Applications				Pesticide Applications					Rainfall (mm)					
			Fall	Spring	P	K	pH	N	P2O5	K2O	S	Type	Product	Rate	Date	Method/ Crop Stage	May	Jun	Jul	Aug	Sep	Yr
Dundalk	1	Soybeans	None	Cultivator 2x	RR	RR	7					Herbicide	Acuron	1.96 L/ac	May 17	PRE	87	31	158	59	17	352
Harriston	1	Wheat	Chisel Plow	Cultivator 2x	LR	NR	7					Herbicide	Acuron	1.96 L/ac	Jun 17	POST	86	31	158	59	17	351
Kinburn	2	Beans			RR	LR		155	46	17	17	Herbicide	Acuron	1.96 L/ac	Aug 13	POST	70	181	151	211	48	661
Wingham	2	Winter Wheat		Joker 2x	MR	LR	7		14	4		Herbicide	Integrity	0.45 L/ac	May 06	PPI						
												Herbicide	Aatrex	.75 L/ac	May 06		90	52	106	70	47	365
Port Hope T2	2	Soybeans	None	Vertical Till 2x	MR	MR	7					Herbicide	Accent	13 g/ac	Jun 14	POST						
												Herbicide	Distinct	114 g/ac	Jun 14	POST	19	58	180	38	50	345
												Herbicide	Acuron	4.9 L/ha	May 15	POST						
Elora	2	Wheat	Disc	Cultivator	LR	MR	8	180	130	130	10	Herbicide	Callisto	0.2 L/ha	Jun 03	POST						
												Herbicide	Accent	33.49 g/ha	Jun 03	POST	101	119	153	62	56	491
												Herbicide	Dual II Magnum	0.5 L/ac	Aug 10	PPI						
Winchester	3E	Spring Wheat	Chisel Plow	Cultivator	MR	MR	7	165	46	17	18	Herbicide	Destra	100 g/ac	Jun 12	POST						
												Herbicide	Agral 90	5L/1000L	Jun 12	POST	66	115	113	152	36	482
												Herbicide	Primextra II Magnum + Callisto 480	3.5L/ha + 0.30L	May 17	PRE						
Ottawa	3E	Wheat	5-Furrow Plow	Mulch Finisher, Trip				250				Herbicide	Acuron	4.91L/ha	Jun 18	POST	56	98	99	135	50	438
												Herbicide	Accent	13 g/ac	Jun 15	POST						
Bainsville	3E	Soybeans	Disc Cultivator	Disc Cultivator	RR	NR	5					Herbicide	Distinct	114 g/ac	Jun 15	POST	47	129	111	245	31	563
Blyth	3W	Winter		Strip Till	LR	RR	7	195	14	4	24	Herbicide	Integrity	0.3 L/ac	May 23	PRE	90	74	125	96	47	432
												Herbicide	Accent	13 g/ac	Jun 14	POST						
Port Hope	3W	Soybeans	None	Vertical Till 2x	MR	MR	7					Herbicide	Distinct	114 g/ac	Jun 14	POST	19	58	180	38	50	345
												Herbicide	Acuron	4.9 L/ha	May 15	POST						
												Herbicide	Callisto	0.2 L/ha	Jun 03	POST						
Waterloo	3W	Wheat	Chisel Plough	Disc	LR	LR	8	175	100	100	14	Herbicide	Accent	33.49 g/ha		POST	96	89	102	50	29	366
		Winter Wheat										Herbicide	Acuron	1.96 L/ac	May 31	PRE						
Ilderton	4	Wheat		Cultivate	MR	MR	8					Herbicide	Roundup W/max	1.0 L/ac	May 31	PRE	100	128	245	78	46	597
			Horsch Joker In August	1 Pass Horsch Joker	MR	MR	6	224	14	4	0	Herbicide	Acuron	1.96 l/ac	May 31	PRE	120	118	94	101	56	489
												Herbicide	Accent	13 g/ac	Jun 12	POST						
Woodstock	4	Soybeans	Chisel Plow	Cultivator 2x	MR	RR	7					Herbicide	Distinct	114 g/ac	Jun 12	POST						
		Winter Wheat/										Herbicide	Corvus	150 mL/ac	May 18	PRE	42	92	108	88	30	360
		Oat CC										Herbicide	FrontierMax	1.25 L/ac	May 26	PPI						
Exeter	4	Wheat		HSD	MR	LR	8		14	4		Herbicide	Marksman	1.5 L/ac	May 31	PRE						
												Herbicide	Roundup W/max	1 L/ac	May 31	PRE	106	59	144	93	47	449
Ridgetown	5	Wheat	Chisel Plow	Cultivate	LR	MR	6	202	14	4	0	Herbicide	Acuron	1.96 l/ac	May 22	POST	94	120	102	109	30	455
Dresden	5	Soybeans	Chisel Plow	Cultivate	MR	RR	7	197	14	4	0	Herbicide	Primextra	1.5 liter/ac	May 27	POST	107	120	96	133	30	486
Tilbury	5	Soybeans	Chisel Plow	Cultivate	LR	RR	6	202	14	4	0	Herbicide	Acuron	1.96 l/ac	May 27	POST	92	93	76	129	30	420

Notes:

Herbicide Application Timings (from Pub 75): PP - Preplant, PPI - Preplant Incorporated, PRE - Preemergence, POST - Postemergence.

Fungicide Application Timings: LV - Late Vegetative, VT - Tassel, R1 - Silking, R2 - Blister, R3 - Milk.