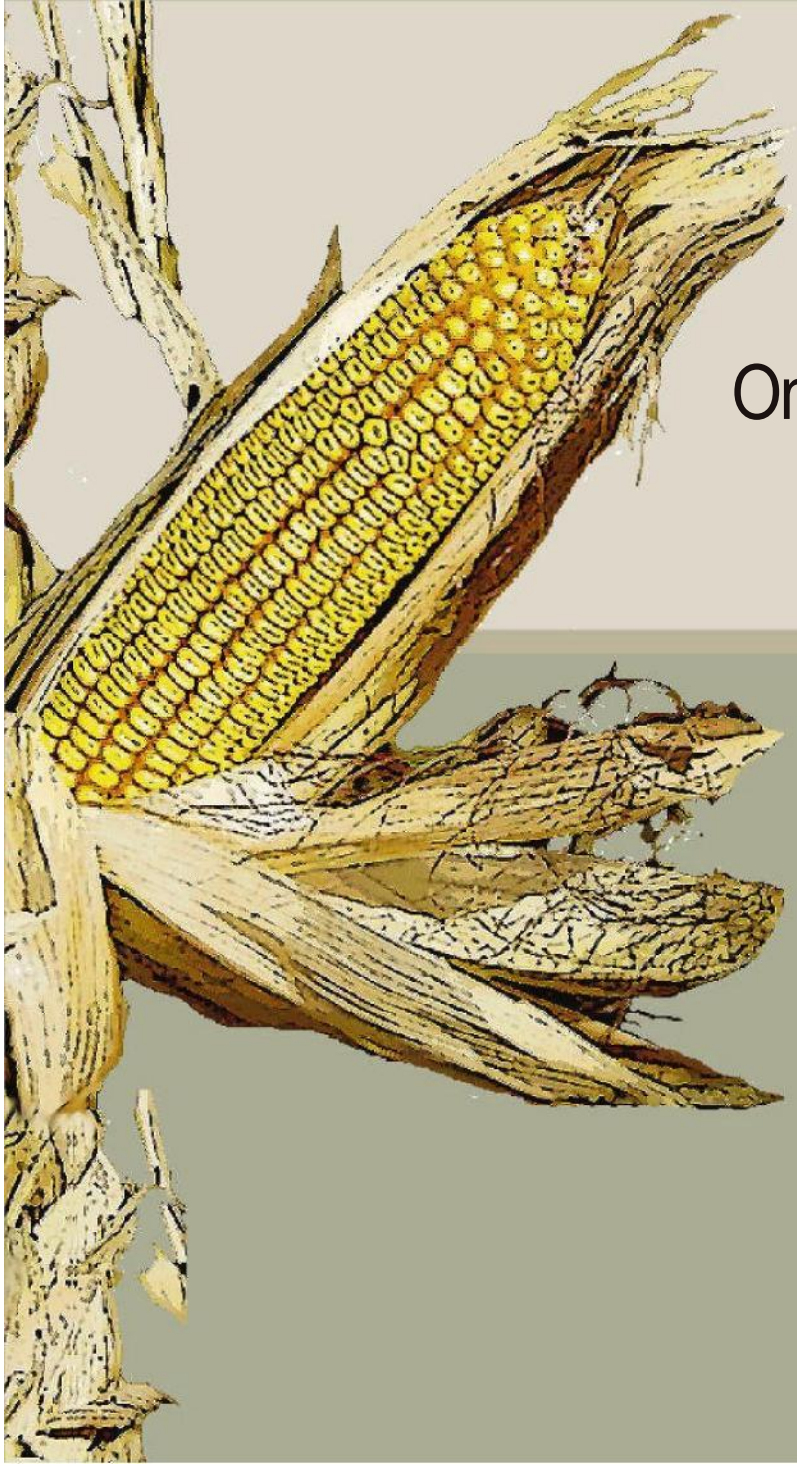


2016

Ontario Hybrid Corn Performance Trials

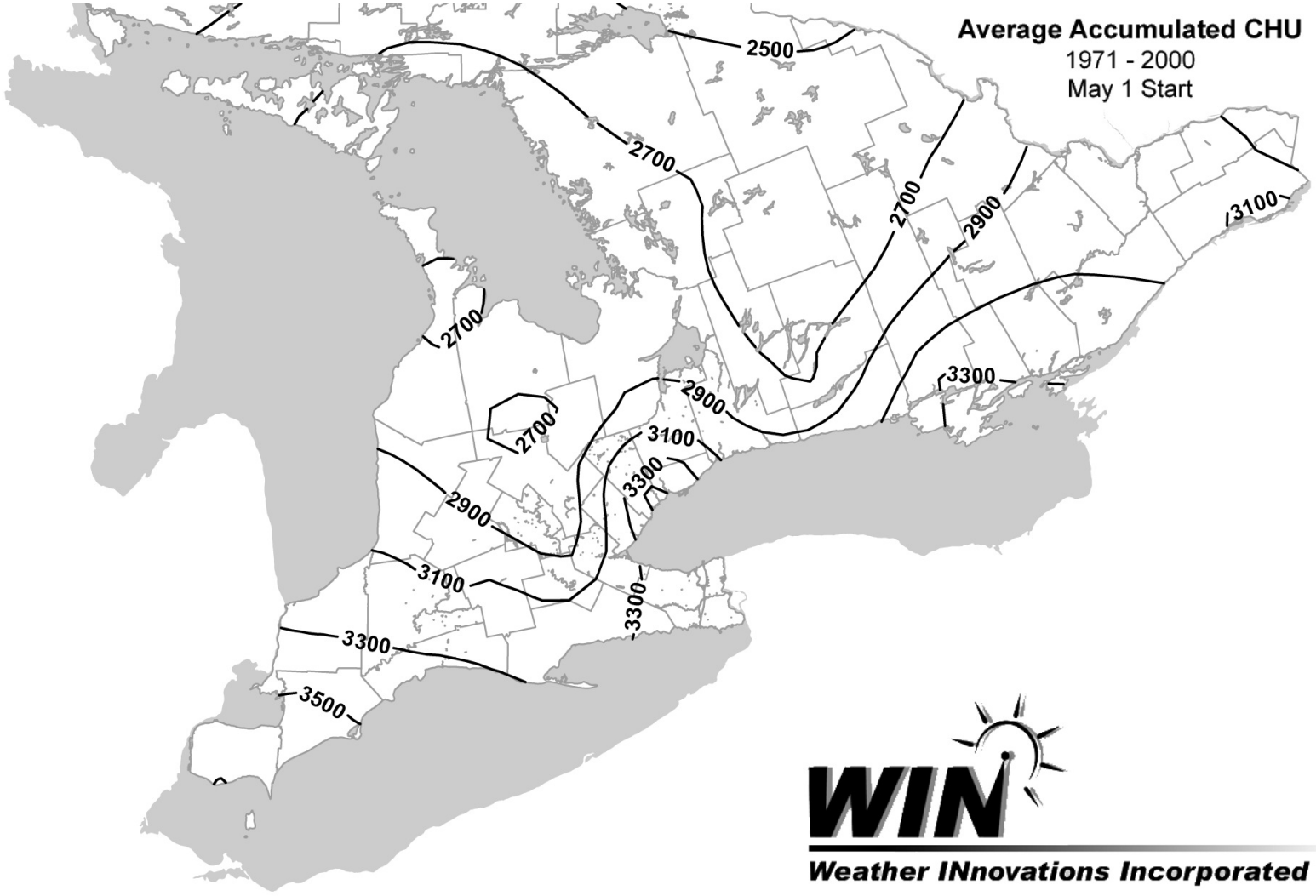
Data collected 2015-2016

Conducted by the Ontario Corn Committee . www.gocorn.net

Go to www.GoCorn.net

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 and Food, the University of Guelph, the Ontario Soil and Crop Improvement Association, the Grain Farmers of Ontario, the Seed Corn Growers of Ontario and the Canadian Seed Trade Association. Tests are conducted each year by the following cooperating agencies: Ridgetown Campus, University of Guelph, Ridgetown; Plant Agriculture Department, University of Guelph; Kemptville Campus, University of Guelph, Kemptville; Kent Ag Research Inc., and 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 OMAF 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 procedures recommended by the Canada Grain Commission.

DUPLICATION OF THIS REPORT:

For further information, contact

The Secretary, Ontario Corn Committee,

109 Maple Ridge Road, R. R. # 2,

Owen Sound, Ontario N4K 5N4.

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, whereas 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 consistently 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.

% 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.

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

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.

Managing Bt Corn - When using Bt corn, it is imperative that a refuge area of non-Bt corn be planted near the Bt corn to reduce the risk of developing insect resistance to Bt. A list of potential refuge hybrids and information related to the practices that must be followed to comply with current regulations can be obtained from the Canadian Corn Refuge Hybrid Selector at www.refugeselector.ca

Hybrids identified with an “O” in the Notes column are available with a refuge hybrid included.

Explanation of Codes for Special Genetic Traits

Code	Trait
B	Resistant to corn borer
D	Resistant to Corn Rootworm
L	Tolerant to Liberty Herbicide
R	Tolerant to glyphosate
Wc	Resistant to Western Bean Cutworm
Ws	Suppresssion of Wester Bean Cutworm
O	Available with Refuge Included

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 18, 2016. Although the Ontario Corn Committee believes the information contained in this report to be accurate, growers are strongly urged 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 Canadian Seed Trade Association's "List of Corn Hybrids Commercially Available in Canada" at http://cdnseed.org/list-of-corn-hybrids

Seed Corn Dealers

Brand or	Company	Address of Canadian Sponsor	Telephone
Country Farm	Country Farm Seeds Ltd.	Box 790, Blenheim, ON N0P 1A0	1-800-449-3990
DEKALB	Monsanto Canada Inc.	900 - One Research Road, Winnipeg, MB R3T 6E3	1-800-667-4944
Dow Seeds	Dow AgroSciences Canada Inc.	P.O. Box 1090, 5 Hyland Dr., Blenheim, ON N0P 1A0	1-800-265-7403
Elite	La Coop federee	9001, Blvd. de L'Acadie, Montreal, QC H4N 3H7	1-514-384-6450
Horizon	Horizon Seeds Canada Inc.	531 Bostwick Rd., Courtland, ON N0J 1E0	1-519-842-5538
Legend Seeds	Sevita International	11451 Cameron Rd., Inkerman, ON K0E 1J0	1-613-989-3000
Maizex	Maizex Seeds Inc.	4488 Mint Line, R.R.#2, Tilbury, ON N0P 2L0	1-877-682-1720
NK Brand	Syngenta Seeds Inc.	15910 Medway Rd., R.R.#1, Arva, ON N0M 1C0	1-800-756-SEED
PICKSEED	DLF Pickseed Canada Inc.	1 Greenfield Road, Lindsay, ON K9V 4S3	1-705-878-9240
Pioneer	Pioneer Hi-Bred Limited	Box 730, 7398 Queens Line, Chatham, ON N7M 5L1	1-800-265-9435
PRIDE Seeds	AgReliant Genetics Inc.	P. O. Box 1088, 6836 Pain Court Line, Chatham, ON N7M 5L6	1-519-354-3210

2016 Trial Locations and General Information - Ontario Hybrid Corn Performance Trials

Location	See Table Number	Heat Unit Rating	5 Year Heat Unit Average [1]	2016 CHU Total [2]	Soil Type	Co-operator	Final plants per acre [3]	Date planted [4]	Date Harvested
Orangeville	1	2700	2816	3107	Sandy Loam	Woodrill Farms Ltd	32000	May 03	Nov 09
Dundalk	1	2600	N/A	2733	Sandy Loam	Leo Blydorp	32000	May 11	Nov 07
Elora	2	2800	2895	3146	Silt Loam	University of Guelph	32000	May 06	Oct 13
Lindsay	2	2800	N/A	2613	Clay Loam	Ed Bagshaw	32500	May 20	Nov 09
Wingham	2	2800	N/A	3175	Silt Loam	Rob Warwick	32000	May 04	Nov 02
Ottawa	3	3000	N/A	3200	Sandy loam	Agriculture and Agri-Food Canada	32000	May 11	Oct 13
Winchester	3	3000	N/A	3146	Silt loam	University of Guelph - Winchester	32000	May 04	Nov 01
Waterloo	3	2900	2966	3246	Sandy Loam	Rosendale Farms Ltd	32000	May 04	Oct 14
Blyth	3	3000	2989	3189	Silt Loam	Peter Heinrich	32000	May 06	Nov 04
Exeter	4	3050	2958	3141	Silt Loam	Cliff Hicks	32000	May 24	Nov 01
Ilderton	4	3100	3099	3361	Silt Loam	John Walls	32000	May 10	Nov 01
Woodstock	4	3150	3036	3283	Loam	University of Guelph	32000	May 10	Oct 31
Belmont	4	3250	3034	3437	Silt Loam	Claire Hooker	32000	May 12	Oct 28
Ridgetown	5	3450	N/A	3664	Loam	University of Guelph- Ridgetown	32000	May 06	Oct 20
Tilbury	5	3650	3456	3635	Silt Loam	Cam Sullivan	32000	May 19	Oct 25
Dresden	5	3600	N/A	3582	Sandy Loam	Brent McFadden	32000	May 09	Oct 24

Notes:

1 Average total heat unit accumulation 2011 - 2015, 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.

2016 Ontario Hybrid Corn Performance Trial Management Information

Location	Table	Previous Crop	Tillage		Soil Test Ratings			Fertilizer Applications			Herbicide or Pesticide Applications				Rainfall (mm)					
			Fall	Spring	P	K	pH	N	P2O5	K2O	Product	Rate	Date	Method	May	Jun	Jul	Aug	Sep	Total
Orangeville	1	Potatoes	disk	cultivator	MR	MR	6.6	148	40	110	Roundup Transorb HC	1.7 l/ha	Apr 20	ppi	37	35	67	88	40	267
											Primextra	3.0 l/ha	Apr 20	ppi						
											Callisto	0.3 l/ha	May 17	pre						
Dundalk	1	Barley	none	Cultivator	MR	HR	7.5	150	135	135	Primextra	4.0 l/ha	May 17	pre	47	45	65	73	35	265
											Callisto	0.3 l/ha	May 17	pre						
Elora	2	Wheat	disk ripper	Cultivator	LR	RR	7.5	160	40	40	Primextra	4.0 l/ha	May 17	pre	57	37	71	171	64	400
											Callisto	0.3 l/ha	May 17	pre						
Lindsay	2	Soybean	None	RTS x 2	MR	HR	7.4	180	80	100	Primextra	3.5 l/ha	May 21	pre	3	33	22	39	54	151
											Callisto	0.3 l/ha	May 21	pre						
											Accent	33 g/ha	Jun 10	post						
Wingham	2	Winter wheat	N/A	2x cultivate				196	100	105	Marksman	4.5 L/ha	Apr 25	pre	53	41	42	156	56	348
											Roundup Weathermax	2 L/ha	Apr 25	pre						
											Peak	13.3 g/ha	Jun 14							
											Banvel II	0.3 L/ha	Jun 14							
											Accent	33.4 g/ha	Jun 14							
											Agral 90	0.2% V/V	Jun 14							
Ottawa	3	Soybeans	Soil save	Disk/mulch finisher	HR	HR	7.3	150	20	0	Primextra II Magnum	3 L/ha	May 10	ppi	10	50	77	104	27	268
											Callisto	0.3 L/ha	May 10	ppi						
											Ultim 75DF	33.7 g/ha	Jun 14	post						
											Distinct	285 g/ha	Jun 14	post						
Winchester	3	soybean	rototiller	cultivator				255			Dual II Magnum	1.75 L/ha	May 04	ppi						N/A
											Accent	33 g/ha	Jun 10	post						
Waterloo	3	Wheat	Chisel	Cultivator	RR	RR	7.1	170	60	120	Primextra	3.5 l/ha	Apr 26	ppi	44	45	97	148	48	382
											Callisto	0.3 l/ha	May 25	post						
Blyth	3	Soybean	None	Strip-till				193	157	145	Primextra 2 Magnum	3.5 L/ha	May 18	pre	44	55	72	188	52	411
											Callisto	0.3 L/ha	May 18	pre						
											Peak	13.3 g/ha	Jun 14	post						
											Banvel II	0.3 L/ha	Jun 14	post						
											Accent	33.4 g/ha	Jun 14	post						
											Agral 90	0.2% V/V	Jun 14	post						
Exeter	4	Winter wheat with Red Clover	Mouldboard plow	Cultivate 2x							Frontier	0.3 L/ha	Aug 20	pre	72	37	135	174	36	454
											Marksman	4.5 L/ha	May 20	pre						
											Peak	13.3 g/ha	Jun 16	post						
											Banvel II	0.3 L/ha	Jul 16	post						
Ilderton	4	Winter wheat	Chisel plow	Cultivate				197	134	255	Primextra 2 Magnum	3.5 L/ha	Apr 20	pre	45	51	79	135	34	344
											Callisto	0.3 L/ha	Apr 20	pre						
Woodstock	4	Wheat	Chisel	Cultivator	LR	MR	7.1	180	90	120	Primextra	4.0 l/ha	May 09	ppi	39	38	60	165	67	369
											Broadstrike RC	62.5 g/ha	May 09	ppi						
											Callisto	0.3 l/ha	Jun 10	post						
											Accent	33 g/ha	Jun 10	post						
Belmont	4	Soybeans	None	Cultivate	LR	RR	5.8	149	53	27	Primextra	1.5 L/ac	May 02	ppi	33	53	93	129	78	386
											Pardner	0.4 L/ac	Jun 01	post						
Ridgetown	5	Soybeans	Chisel Plow	Cultivate	RR	MR	5.7	187	54	24	Primextra	1.4 L/ac	May 17	post	39	59	95	77	99	369
											Callisto	0.12 L/ac	May 17	post						
Tilbury	5	Soybeans	None	Cultivate	MR	RR	7.6	150	53	27	Primextra	1.4 L/ac	May 24	post	54	30	128	172	95	479
											Callisto	0.12 L/ac	May 24	post						
Dresden	5	Soybeans	Chisel Plow	Cultivate	MR	MR	7.1	146	54	24	Primextra	1.4 L/ac	May 18	post	70	34	137	186	98	525
											Callisto	0.12 L/ac	May 18	post						