

**ONTARIO FARM INPUT MONITORING PROJECT**  
**SURVEY # 1 – May 3, 2023**  
**ECONOMICS AND BUSINESS GROUP, RIDGETOWN CAMPUS - U of G**

**Background**

The Ontario Farm Input Monitoring Project is a survey of farm supply stores to collect cash retail prices that commercial farmers pay, when purchasing bulk fuels, fertilizers, and pesticides. Prices are collected on 45 farm inputs from 8 centres in Ontario, 3 in Michigan, 1 in Ohio and 1 in Indiana. Enumerators obtained current pricing from a minimum of 3 retail outlets in their assigned centre using the pre-designed survey form.

**Results**

**(i) Ontario Prices**

This is the first survey for 2023. On May 3, 2023, the Canadian dollar was lower than the U.S. dollar (\$1 C = \$0.7344 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$1.38 per litre, Diesel Fuel (coloured) averaged \$1.32 per litre and Propane (farm dryer) prices averaged \$0.68 per litre.

Fertilizer prices showed Urea prices ranging from \$1,028 to \$1,400 a tonne with an average price of \$1,138. Nitrogen Solution (UAN) 28% prices ranged from \$580 to \$910 with an average price of \$777 per tonne. Mono-Ammonium Phosphate prices varied from \$1,271 to \$1,441 per tonne with an average price of \$1,347. Muriate of Potash prices averaged \$977 per tonne with a range from \$875 to \$1,091.

With respect to pesticide prices, 2,4-D Amine prices ranged from \$11.00 to \$21.53 per litre with an average of \$13.62. Callisto prices ranged from \$107.45 to \$141.00 per litre. Roundup WeatherMAX prices averaged \$13.80 per litre while Dual II Magnum prices averaged \$41.79 per litre and Pursuit averaged \$150.38 per litre. Sencor prices averaged \$70.53 per kilogram. The price for Halex GT ranged from \$17.50 to \$21.41 with an average of \$19.86 per litre. Prowl H20 prices averaged \$18.41 per litre. Coragen prices ranged from \$179.42 to \$228.5 per litre. Miravis Ace averaged \$64.24 per litre.

Ontario product prices when compared to May 4, 2022 showed that fuel prices on average were down 20%, fertilizer prices were down 10% on average, and pesticide prices were up 8%. The Canadian dollar was down \$0.05 or 6% relative to the U.S. dollar from a year ago.

Since the previous survey on October 5, 2022, changes in average prices showed that the fuel products group was down 8% and the fertilizer products group was also down 8%. Pesticide products as a group were up 8%. The Canadian dollar was up 0.2% relative to the U.S. dollar.

**(ii) Comparison Between Ontario and Nearby U.S. States**

Some of the products higher priced in Ontario include: Regular Unleaded Gasoline +14%; Diesel Fuel (coloured) +16%; Urea +24%; Mono-Ammonium Phosphate +6%; Muriate of Potash 60% +9%; Atrazine +37%; Classic +39%; Dual II Magnum +23%; and Sencor +40%.

Products lower priced in Ontario include: Acuron -33%; Halex GT -25%; MCPA Amine 500 -12%; Prowl -12%; XtendiMax -21%; Delegate -19%; Delaro Complete -38%; and Miravis Ace -18%.

The exact implications at the farm level of this variability between Ontario and the U.S. for farm inputs depends greatly on individual producer product selections and purchase timing.

*Appreciation is extended to Agriculture & Agri-Food Canada for funding this project.*

**ONTARIO/U.S. FARM INPUT MONITORING PROJECT**  
**SURVEY # 1 – May 3, 2023**  
**ECONOMICS AND BUSINESS SECTION, RIDGETOWN CAMPUS - U OF G**

**Background**

The Ontario/U.S. Farm Input Monitoring Project is a survey of farm supply stores to collect cash retail prices that commercial farmers pay, when purchasing bulk fuels, fertilizers, and pesticides. Prices are collected on 45 farm inputs from 8 centres in Ontario, 3 in Michigan, 1 in Ohio and 1 in Indiana. Enumerators obtained current pricing from a minimum of 3 retail outlets in their assigned centre using the pre-designed survey form.

**Results**

**(i) U.S. Prices**

This is the first survey for 2023. On May 3, 2023, the Canadian dollar was lower than the U.S. dollar (\$1 C = \$0.7344 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$3.36 per gallon, Diesel Fuel (farm) averaged \$3.16 per gallon and Propane (farm dryer) prices averaged \$1.85 per gallon.

Fertilizer prices showed Urea prices ranging from \$560 to \$685 a ton with an average price of \$612. Nitrogen Solution (UAN) 28% prices averaged \$458 per ton. Mono-Ammonium Phosphate prices ranged from \$750 to \$895 with an average price of \$845 per ton. Muriate of Potash prices averaged \$595 per ton with a range from \$560 to \$645.

With respect to pesticide prices, Atrazine prices ranged from \$20.87 to \$31.27 per gallon with an average of \$26.45. Halex GT prices averaged \$73.29 per gallon while Dual II Magnum averaged \$94.73 per gallon. Prowl H20 prices ranged from \$42.04 to \$67.15 per gallon. The price for Miravis Ace varied from \$170.58 to \$237.05 with an average price of \$216.56 per gallon. Warrior II prices ranged from \$245.76 to \$449.66 per gallon.

U.S. product prices when compared to May 4, 2022, showed that fuel prices on average were down 20%, fertilizer prices were down 29% on average, and pesticide prices on average were up 7%. The Canadian dollar was down \$0.05 or 6% relative to the U.S. dollar from a year ago.

Since the previous survey on October 5, 2022, changes in average prices showed that the fuel products group was down 17%, the fertilizer products as a group were down 22% and the pesticide products as a group were up 5%. The Canadian dollar was up 0.2% relative to the U.S. dollar.

**(ii) Comparison Between Ontario and Nearby U.S. States**

Some of the products higher priced in Ontario include: Regular Unleaded Gasoline +14%; Diesel Fuel (coloured) +16%; Urea +24%; Mono-Ammonium Phosphate +6%; Muriate of Potash 60% +9%; Atrazine +37%; Classic +39%; Dual II Magnum +23%; and Sencor +40%.

Products lower priced in Ontario include: Acuron -33%; Halex GT -25%; MCPA Amine 500 -12%; Prowl -12%; XtendiMax -21%; Delegate -19%; Delaro Complete -38%; and Miravis Ace -18%.

The exact implications at the farm level of this variability between Ontario and the U.S. for farm inputs depends greatly on individual producer product selections and purchase timing.

## **DATA COLLECTION METHODOLOGY**

### **Survey Details**

- Sample size - Approximately 24 Ontario and 15 U.S. retail outlets were surveyed.
- Method - The fertilizer and pesticide prices were obtained by personal visits to a cross section of outlet stores. Petroleum prices were collected by a combination of both personal visit and phone.
- Locations - Refers to geographic trading areas.

### **Terms and Conditions**

- Price - The price collected was defined as the cash retail price an average commercial farmer would pay when purchasing a minimum amount of fuel, fertilizer, and pesticide.
- Volume - Price reductions due to large volumes, bulk purchases, special memberships, or yearend sales incentives were not considered. Price quotes were for cash and carry.
- Services - All additional services i.e. delivery, testing or application, were excluded from the price quote.
- Levy - The Canadian container recycling levy was not subtracted from the Canadian price.
- Petroleum - In Ontario the fuel tank and pump is assumed to be owned by the fuel supplier while in the U.S. the tank and pump is owned by the farmer.

### **Price Comparisons**

- Exchange - The May 3, 2023 daily average rate for the Bank of Canada was used. i.e. \$1.3616 Canadian equals \$1 U.S. (or \$0.7344 U.S. equals \$1 Canadian)
- Average - The arithmetic average of all price quotes for each geographic centre was calculated.
- Conversion - U.S. prices were converted to their Canadian equivalent by adjusting for exchange rate, measure, and concentration.
- Values - For mixing cost, \$.01 designates no charge.
- GST - Where applicable, GST was excluded from the input cost.

## Price Comparison in Canadian Dollars Between Ontario and Nearby American States for May 03, 2023

ONTARIO PRODUCT	UNIT	ALL ONT. LOCATIONS				ALL U.S. LOCATIONS		
		MIN	MAX	AVG		MIN	MAX	AVG
Regular Unleaded Gasoline	LITRE	1.29	1.57	1.38		1.17	1.30	1.21
Diesel Fuel (coloured)	LITRE	1.15	1.85	1.32		1.11	1.16	1.14
Propane (farm dryer)	LITRE	0.49	0.92	0.68		0.53	0.79	0.66
Anhydrous Ammonia 82-0-0 (no servic	TONNE					1215.72	1425.85	1293.27
Urea 46%	TONNE	1028.20	1400.00	1138.23		840.50	1028.11	918.55
Nitrogen Solution (UAN) 28%	TONNE	580.00	910.00	777.35		556.83	817.99	688.08
Mono-Ammonium Phosphate 11-52-0	TONNE	1270.70	1440.60	1347.22		1125.67	1343.30	1268.25
Di-Ammonium Phosphate 18-46-0	TONNE					1193.21	1260.75	1229.23
Triple Superphosphate 0-46-0	TONNE							
Muriate of Potash 60%	TONNE	875.00	1090.60	977.47		840.50	968.08	893.03
Liquid 6-24-6	TONNE	745.19	1610.00	1367.09		1726.78	2030.06	1878.42
Liquid 10-34-0	TONNE	980.00	1278.00	1230.71		1163.19	1290.77	1210.88
Mixing Charge (no GST or PST)	TONNE	10.00	28.00	16.82		18.01	22.51	21.01
2,4-D Amine 600 (564 g/l EC)	LITRE	11.00	21.53	13.62		8.99	14.07	12.89
Accent 75 DF (75 DF)	GRAM	2.14	4.95	2.62		1.24	1.25	1.25
Acuron (71. g, 28.5 g, 257, 120 g/L)	LITRE	17.79	21.25	19.84		22.56	33.64	29.41
Atrazine 480 (480 g/l SU)	LITRE	11.76	13.75	12.99		7.51	11.25	9.52
Authority Supreme (2@250 g/L, SC)	LITRE	129.75	173.35	148.03		149.71	235.70	183.29
Basagran (480 g/l SN)	LITRE	30.30	40.68	37.98		23.79	35.64	30.48
Callisto 480 SC (480 g/L SC)	LITRE	107.45	141.00	120.78		52.16	137.28	115.11
Classic (25% WG)	GRAM	0.68	1.99	1.30		0.61	1.10	0.94
Dual II Magnum (915 g/l EC)	LITRE	37.61	45.00	41.79		24.35	41.22	34.08
Frontier MAX (720 g/L EC)	LITRE	42.25	78.98	71.08				
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	17.50	21.41	19.86		19.81	29.34	26.37
Integrity (68 g/L, 600 g/L EC)	LITRE	61.64	80.70	73.40		54.45	102.31	76.54
MCPA Amine 500 (500 g/l SN)	LITRE	10.30	17.65	14.32		13.51	18.47	16.35
Pardner (280 g/l EC)	LITRE	19.00	26.99	24.62		25.32	27.33	26.43
Prowl H2O (455 g/L EC)	LITRE	15.33	20.73	18.41		15.12	24.16	20.98
Pursuit (240 g/l SN)	LITRE	118.18	168.91	150.38		102.02	187.27	135.32
Reflex (240 g/L EC)	LITRE	50.42	60.50	56.37		21.79	25.35	23.21
Roundup WeatherMAX (540 g/l SN)	LITRE	10.50	15.75	13.80		14.15	17.89	15.65
Sencor 75 DF (75% WG)	KILOG	59.25	81.00	70.53		42.02	59.14	50.45
XtendiMax 350 g/L SN	LITRE	17.58	30.77	21.51		22.28	29.98	27.31
Coragen (200 g/L SU)	LITRE	179.42	228.50	212.25		318.21	464.86	409.21
Delegate (25% WG)	GRAM	0.39	0.69	0.46		0.52	0.61	0.57
Malathion 500 EC (500 g/l EC)	LITRE	17.00	33.60	27.57		21.45	33.77	27.70
Matador 120EC (120 g/L EC)	LITRE	177.25	207.67	193.53		42.56	77.87	61.60
Pounce (384 g/L EC)	LITRE	58.75	95.00	65.23		7.33	43.59	28.92
Sevin XLR+ (480 g/l LI)	LITRE	32.40	52.80	40.84		25.86	30.74	28.97
Bravo (500 g/l SC)	LITRE	16.50	20.28	18.11		7.09	12.13	9.60
Caramba (90 g/L LI)	LITRE	35.19	51.48	47.37		27.34	63.75	50.72
Delaro Complete (176.2g, 154g, 128.3	LITRE	63.50	99.63	90.22		112.33	192.34	146.21
Miravis Ace (150 g/L, 125 g/L)	LITRE	54.20	69.88	64.24		61.36	85.28	77.91
Nova 40 W (40% WP)	KILOG	276.78	310.69	297.34		160.42	200.28	182.99
Prosaro Pro (1@200 g, 2@100g/L SU)	LITRE	66.80	83.10	78.22		33.89	120.66	97.05
Ethrel (240 g/l LI)	LITRE	22.00	27.05	24.65		6.14	12.95	8.10

Exchange Rate: 1.3616

**PRICE COMPARISON BETWEEN ONTARIO AND NEARBY AMERICAN STATES FOR MAY 3, 2023**  
**AVERAGE ONTARIO/U.S. PRICE IN CDN DOLLARS AND PERCENT DIFFERENCE**

<b>ONTARIO PRODUCT</b>	<b>UNIT</b>	<b>AVERAGE ONTARIO PRICE</b>	<b>AVERAGE U.S. PRICE</b>	<b>ONTARIO VS U.S.</b>	<b>ONTARIO 2023 VS ON 2022</b>
Regular Unleaded Gasoline	LITRE	1.38	1.21	13.9%	-16.3%
Diesel Fuel (coloured)	LITRE	1.32	1.14	16.2%	-30.4%
Propane (farm dryer)	LITRE	0.68	0.66	2.8%	-12.1%
Anhydrous Ammonia 82-0-0 (no service)	TONNE		1,293.27		
Urea 46%	TONNE	1,138.23	918.55	23.9%	-16.3%
Nitrogen Solution (UAN) 28%	TONNE	777.35	688.08	13.0%	-17.8%
Mono-Ammonium Phosphate 11-52-0	TONNE	1,347.22	1,268.25	6.2%	-1.5%
Di-Ammonium Phosphate 18-46-0	TONNE		1,229.23		
Triple Superphosphate 0-46-0	TONNE				
Muriate of Potash 60%	TONNE	977.47	893.03	9.5%	-8.5%
Liquid 6-24-6	TONNE	1,367.09	1,878.42	-27.2%	-6.4%
Liquid 10-34-0	TONNE	1,230.71	1,210.88	1.6%	-6.8%
Mixing Charge (no GST or PST)	TONNE	16.82	21.01	-20.0%	-7.3%
2,4-D Amine 600 (564 g/l EC)	LITRE	13.62	12.89	5.6%	10.5%
Accent 75 DF (75 DF)	GRAM	2.62	1.25	110.7%	13.7%
Acuron (71. g, 28.5 g, 257, 120 g/L)	LITRE	19.84	29.41	-32.5%	
Atrazine 480 (480 g/l SU)	LITRE	12.99	9.52	36.6%	8.9%
Authority Supreme (2@250 g/L, SC)	LITRE	148.03	183.29	-19.2%	
Basagran (480 g/l SN)	LITRE	37.98	30.48	24.6%	10.5%
Callisto 480 SC (480 g/L SC)	LITRE	120.78	115.11	4.9%	8.2%
Classic (25% WG)	GRAM	1.30	0.94	39.1%	0.8%
Dual II Magnum (915 g/l EC)	LITRE	41.79	34.08	22.6%	6.7%
Frontier MAX (720 g/L EC)	LITRE	71.08			8.9%
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	19.86	26.37	-24.7%	8.9%
Integrity (68 g/L, 600 g/L EC)	LITRE	73.40	76.54	-4.1%	
MCPA Amine 500 (500 g/l SN)	LITRE	14.32	16.35	-12.4%	28.4%
Pardner (280 g/l EC)	LITRE	24.62	26.43	-6.8%	9.4%
Prowl H2O (455 g/L EC)	LITRE	18.41	20.98	-12.2%	12.2%
Pursuit (240 g/l SN)	LITRE	150.38	135.32	11.1%	9.5%
Reflex (240 g/L EC)	LITRE	56.37	23.21	142.9%	7.9%
Roundup WeatherMAX (540 g/l SN)	LITRE	13.80	15.65	-11.8%	-24.4%
Sencor 75 DF (75% WG)	KILOG	70.53	50.45	39.8%	8.0%
XtendiMax 350 g/L SN	LITRE	21.51	27.31	-21.2%	15.4%
Coragen (200 g/L SU)	LITRE	212.25	409.21	-48.1%	8.0%
Delegate (25% WG)	GRAM	0.46	0.57	-19.2%	8.3%
Malathion 500 EC (500 g/l EC)	LITRE	27.57	27.70	-0.5%	6.0%
Matador 120EC (120 g/L EC)	LITRE	193.53	61.60	214.2%	11.1%
Pounce (384 g/L EC)	LITRE	65.23	28.92	125.5%	6.4%
Sevin XLR+ (480 g/l LI)	LITRE	40.84	28.97	41.0%	29.9%
Bravo (500 g/l SC)	LITRE	18.11	9.60	88.6%	3.7%
Caramba (90 g/L LI)	LITRE	47.37	50.72	-6.6%	0.8%
Delaro Complete (176.2g, 154g, 128.3g)	LITRE	90.22	146.21	-38.3%	
Miravis Ace (150 g/L, 125 g/L)	LITRE	64.24	77.91	-17.5%	6.3%
Nova 40 W (40% WP)	KILOG	297.34	182.99	62.5%	2.0%
Prosaro Pro (1@200 g, 2@100g/L SU)	LITRE	78.22	97.05	-19.4%	
Ethrel (240 g/l LI)	LITRE	24.65	8.10	204.2%	7.6%

**Exchange Rate: 1.3616**

**Seed Pricing (May 3, 2023)**

Exchange Rate: 1.3616

Commodity	Unit	Ontario (\$CAD)			U.S. (\$CAD)			Ontario vs. U.S. AVG
		MIN	MAX	AVG	MIN	MAX	AVG	
Wheat	22.7 kg	27.50	47.81	34.30	27.16	48.80	34.68	-1.1%
Corn RR	80,000 seeds	295.00	399.00	363.92	360.82	460.11	411.32	-11.5%
Corn Conventional	80,000 seeds	215.00	331.00	261.83	269.60	363.55	333.61	-21.5%
Soybean RR	140,000 seeds	62.05	101.00	84.18	68.08	113.29	82.93	1.5%
Soybean Conventional	22.7 kg	38.45	75.00	60.94	64.00	102.83	75.67	-19.5%

Commodity	Unit	U.S. (\$USD)			Ontario (\$USD)			U.S. vs. Ontario AVG
		MIN	MAX	AVG	MIN	MAX	AVG	
Wheat	50 lb	19.95	35.84	25.47	20.20	35.11	25.19	1.1%
Corn RR	80,000 seeds	265.00	337.92	302.08	216.66	293.04	267.28	11.5%
Corn Conventional	80,000 seeds	198.00	267.00	245.01	157.90	243.10	192.30	21.5%
Soybean RR	140,000 seeds	50.00	83.20	60.90	45.57	74.18	61.82	-1.5%
Soybean Conventional	50 lb	47.00	75.52	55.58	28.24	55.08	44.75	19.5%

Note: The price collected was defined as the cash retail price that a commercial farmer would pay when purchasing a minimum amount of seed. Seed varieties vary by location.