

**ONTARIO FARM INPUT MONITORING PROJECT**  
**SURVEY # 3 – October 5, 2022**  
**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 third survey for 2022. On October 5, 2022, the Canadian dollar was lower than the U.S. dollar (\$1 C = \$0.7331 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$1.43 per litre, Diesel Fuel (coloured) averaged \$1.60 per litre and Propane (farm dryer) prices averaged \$0.70 per litre.

Fertilizer prices showed Urea prices ranging from \$1,095 to \$1,425 a tonne with an average price of \$1,274. Nitrogen Solution (UAN) 28% prices ranged from \$612 to \$1,050 with an average price of \$851 per tonne. Mono-Ammonium Phosphate prices varied from \$1,305 to \$1,429 per tonne with an average price of \$1,372. Muriate of Potash prices averaged \$1,116 per tonne with a range from \$1,010 to \$1,170.

With respect to pesticide prices, 2,4-D Amine prices ranged from \$10.80 to \$15.50 per litre with an average of \$12.37. Callisto prices ranged from \$102.92 to \$116.75 per litre. Credit Xtreme prices averaged \$17.78 per litre while Dual II Magnum prices averaged \$38.79 per litre and Pursuit averaged \$138.36 per litre. Sencor prices averaged \$64.76 per kilogram. The price for Halex GT ranged from \$16.30 to \$19.90 with an average of \$18.39 per litre. Prowl H2O prices averaged \$16.27 per litre. Delegate prices ranged from \$0.36 to \$0.44 per gram. Miravis Ace averaged \$60.26 per litre.

Ontario product prices when compared to October 6, 2021 showed that fuel prices on average were up 17%, fertilizer prices were up 49% on average, and pesticide prices were up 3%. The Canadian dollar was down \$0.06 or 8% relative to the U.S. dollar from a year ago.

Since the previous survey on June 15, 2022, changes in average prices showed that the fuel products group was down 13% and the fertilizer products group was down slightly. Pesticide products as a group were similar. The Canadian dollar was down \$0.04 or 5% 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 +5%; Atrazine +12%; Dual II Magnum +20%; Classic +53%; Basagran +18%; and Sencor +27%.

Products lower priced in Ontario include: Urea -5%; Nitrogen Solution (UAN) 28% -7%; Mono-Ammonium Phosphate -8%; Muriate of Potash 60% -16%; Callisto -9%; Halex GT -25%; 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 # 3 – October 5, 2022**  
**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 third survey for 2022. On October 5, 2022, the Canadian dollar was lower than the U.S. dollar (\$1 C = \$0.7331 US).

Fuel prices showed that Regular Unleaded Gasoline prices averaged \$3.79 per gallon, Diesel Fuel (farm) averaged \$4.54 per gallon and Propane (farm dryer) prices averaged \$2.07 per gallon.

Fertilizer prices showed Urea prices ranging from \$800 to \$970 a ton with an average price of \$889. Nitrogen Solution (UAN) 28% prices averaged \$610 per ton. Mono-Ammonium Phosphate prices ranged from \$962 to \$1,030 with an average price of \$990 per ton. Muriate of Potash prices averaged \$880 per ton with a range from \$805 to \$925.

With respect to pesticide prices, Atrazine prices ranged from \$24.42 to \$39.96 per gallon with an average of \$29.43. Halex GT prices averaged \$67.91 per gallon while Dual II Magnum averaged \$89.53 per gallon. Prowl H20 prices ranged from \$36.76 to \$61.60 per gallon. The price for Miravis Ace varied from \$160.79 to \$246.06 with an average price of \$203.63 per gallon. Warrior II prices ranged from \$256.75 to \$432.25 per gallon.

U.S. product prices when compared to October 6, 2021, showed that fuel prices on average were up 31%, fertilizer prices were up 38% on average, and pesticide prices on average were up 15%. The Canadian dollar was down \$0.06 or 8% relative to the U.S. dollar from a year ago.

Since the previous survey on June 15, 2022, changes in average prices showed that the fuel products group was down 11%, the fertilizer products as a group were down 7% and the pesticide products as a group were up 4%. The Canadian dollar was down \$0.04 or 5% 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 +5%; Atrazine +12%; Dual II Magnum +20%; Classic +53%; Basagran +18%; and Sencor +27%.

Products lower priced in Ontario include: Urea -5%; Nitrogen Solution (UAN) 28% -7%; Mono-Ammonium Phosphate -8%; Muriate of Potash 60% -16%; Callisto -9%; Halex GT -25%; 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 October 5, 2022 daily average rate for the Bank of Canada was used. i.e. \$1.3641 Canadian equals \$1 U.S. (or \$0.7331 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 Oct 05, 2022

ONTARIO PRODUCT	UNIT	ALL ONT. LOCATIONS				ALL U.S. LOCATIONS		
		MIN	MAX	AVG		MIN	MAX	AVG
Regular Unleaded Gasoline	LITRE	1.19	1.59	1.43		1.16	1.52	1.37
Diesel Fuel (coloured)	LITRE	1.36	1.77	1.60		1.49	1.82	1.64
Propane (farm dryer)	LITRE	0.54	0.84	0.70		0.68	0.83	0.75
Anhydrous Ammonia 82-0-0 (no servic	TONNE					2255.47	2368.24	2311.86
Urea 46%	TONNE	1095.00	1425.00	1273.79		1202.92	1458.54	1337.12
Nitrogen Solution (UAN) 28%	TONNE	612.00	1050.00	850.77		745.81	1051.05	917.23
Mono-Ammonium Phosphate 11-52-0	TONNE	1305.00	1429.00	1371.92		1446.51	1548.76	1488.86
Di-Ammonium Phosphate 18-46-0	TONNE					1351.78	1744.23	1491.99
Triple Superphosphate 0-46-0	TONNE							
Muriate of Potash 60%	TONNE	1010.00	1170.00	1116.29		1210.44	1390.87	1323.21
Liquid 6-24-6	TONNE	1240.80	1723.00	1438.40		1996.84	1996.84	1996.84
Liquid 10-34-0	TONNE	1253.00	1684.80	1378.11		1075.11	1578.83	1325.47
Mixing Charge (no GST or PST)	TONNE	11.50	28.00	17.39		15.04	15.04	15.04
2,4-D Amine 600 (564 g/l EC)	LITRE	10.80	15.50	12.37		10.01	17.35	13.66
Atrazine 480 (480 g/l SU)	LITRE	11.00	12.65	11.90		8.80	14.40	10.61
XtendiMax 350 g/L SN	LITRE	16.21	20.19	18.93		20.09	28.31	24.10
Accent 75 DF (75 DF)	GRAM	2.10	2.43	2.31		1.06	1.70	1.26
Dual II Magnum (915 g/l EC)	LITRE	33.65	41.00	38.79		22.76	39.69	32.27
Callisto 480 SC (480 g/L SC)	LITRE	102.92	116.75	111.36		90.78	153.52	122.61
Frontier MAX (720 g/L EC)	LITRE	48.20	69.23	64.79				
MCPA Amine 500 (500 g/l SN)	LITRE	5.15	16.57	11.32		12.61	22.64	16.18
Pursuit (240 g/l SN)	LITRE	105.15	150.10	138.36		86.95	170.56	123.18
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	16.30	19.90	18.39		19.02	28.20	24.47
Credit Xtreme (540 g/l SN)	LITRE	14.50	20.20	17.78				
Sencor 75 DF (75% WG)	KILOG	57.20	71.75	64.76		42.10	57.74	50.99
Select (240 g/L EC)	LITRE	99.67	116.67	113.25		41.53	44.21	43.02
Basagran (480 g/l SN)	LITRE	30.55	36.78	33.97		23.32	32.78	28.79
Prowl H2O (455 g/L EC)	LITRE	13.66	17.19	16.27		13.25	22.20	18.17
Pardner (280 g/l EC)	LITRE	17.95	24.05	22.17		23.73	26.59	25.16
Lumax EZ (298 g/L, 112 g/L, 29.8 g/L)	LITRE	15.50	17.20	16.90		25.38	28.95	26.87
Classic (25% WG)	GRAM	1.02	1.45	1.30		0.58	1.05	0.85
Assure II (96 g/L EC)	LITRE	36.67	91.67	75.19		20.69	44.29	31.63
Reflex (240 g/L EC)	LITRE	47.50	54.80	52.07		19.96	24.96	22.83
Coragen (200 g/L SU)	LITRE	179.42	219.75	196.60		320.71	532.66	409.56
Malathion 500 EC (500 g/l EC)	LITRE	17.90	34.20	26.85		15.08	33.43	20.14
Sevin XLR+ (480 g/l LI)	LITRE	25.50	39.00	31.47		23.55	31.66	28.18
Pounce (384 g/L EC)	LITRE	53.75	85.00	62.35		20.13	28.76	24.45
Matador 120EC (120 g/L EC)	LITRE	159.26	210.05	175.61		44.55	75.00	61.09
Delegate (25% WG)	GRAM	0.36	0.44	0.42		0.50	0.58	0.53
Bravo (500 g/l SC)	LITRE	16.50	18.42	16.99		8.87	12.75	10.69
Captan 80 W (80% DG)	KILOG	15.00	31.20	20.50		15.22	19.88	17.74
Headline AMP (146 g/L, 55 g/L LI)	LITRE	42.63	61.05	55.14		49.68	76.73	61.81
Nova 40 W (40% WP)	KILOG	267.86	303.57	291.14		159.27	202.57	183.49
Caramba (90 g/L LI)	LITRE	32.94	51.10	46.72		33.31	63.87	47.03
Miravis Ace (150 g/L, 125 g/L)	LITRE	49.50	63.76	60.26		57.95	88.68	73.39
Ethrel (240 g/l LI)	LITRE	20.80	23.30	22.88		8.01	13.51	10.76

Exchange Rate: 1.3641

**PRICE COMPARISON BETWEEN ONTARIO AND NEARBY AMERICAN STATES FOR OCTOBER 5, 2022**  
**AVERAGE ONTARIO/U.S. PRICE IN CDN DOLLARS AND PERCENT DIFFERENCE**

ONTARIO PRODUCT	UNIT	AVERAGE ONTARIO PRICE	AVERAGE U.S. PRICE	ONTARIO VS U.S.	ONTARIO 2022 VS ON 2021
Regular Unleaded Gasoline	LITRE	1.43	1.37	4.8%	15.2%
Diesel Fuel (coloured)	LITRE	1.60	1.64	-2.1%	46.5%
Propane (farm dryer)	LITRE	0.70	0.75	-5.6%	-12.1%
Anhydrous Ammonia 82-0-0 (no service)	TONNE		2,311.86		
Urea 46%	TONNE	1,273.79	1,337.12	-4.7%	64.3%
Nitrogen Solution (UAN) 28%	TONNE	850.77	917.23	-7.2%	74.6%
Mono-Ammonium Phosphate 11-52-0	TONNE	1,371.92	1,488.86	-7.9%	26.2%
Di-Ammonium Phosphate 18-46-0	TONNE		1,491.99		
Triple Superphosphate 0-46-0	TONNE				
Muriate of Potash 60%	TONNE	1,116.29	1,323.21	-15.6%	65.6%
Liquid 6-24-6	TONNE	1,438.40	1,996.84	-28.0%	27.1%
Liquid 10-34-0	TONNE	1,378.11	1,325.47	4.0%	33.9%
Mixing Charge (no GST or PST)	TONNE	17.39	15.04	15.6%	12.9%
2,4-D Amine 600 (564 g/l EC)	LITRE	12.37	13.66	-9.4%	8.4%
Atrazine 480 (480 g/l SU)	LITRE	11.90	10.61	12.2%	9.0%
XtendiMax 350 g/L SN	LITRE	18.93	24.10	-21.5%	0.5%
Accent 75 DF (75 DF)	GRAM	2.31	1.26	84.0%	-1.1%
Dual II Magnum (915 g/l EC)	LITRE	38.79	32.27	20.2%	0.3%
Callisto 480 SC (480 g/L SC)	LITRE	111.36	122.61	-9.2%	6.5%
Frontier MAX (720 g/L EC)	LITRE	64.79			-1.5%
MCPA Amine 500 (500 g/l SN)	LITRE	11.32	16.18	-30.0%	-3.7%
Pursuit (240 g/l SN)	LITRE	138.36	123.18	12.3%	3.5%
Halex GT (2 @ 250 g/L, 1 @ 25 g/L)	LITRE	18.39	24.47	-24.9%	16.7%
Credit Xtreme (540 g/l SN)	LITRE	17.78			35.9%
Sencor 75 DF (75% WG)	KILOG	64.76	50.99	27.0%	1.2%
Select (240 g/L EC)	LITRE	113.25	43.02	163.3%	6.5%
Basagran (480 g/l SN)	LITRE	33.97	28.79	18.0%	3.2%
Prowl H2O (455 g/L EC)	LITRE	16.27	18.17	-10.4%	1.2%
Pardner (280 g/l EC)	LITRE	22.17	25.16	-11.9%	1.8%
Lumax EZ (298 g/L, 112 g/L, 29.8 g/L)	LITRE	16.90	26.87	-37.1%	-5.1%
Classic (25% WG)	GRAM	1.30	0.85	53.0%	-0.1%
Assure II (96 g/L EC)	LITRE	75.19	31.63	137.8%	-5.0%
Reflex (240 g/L EC)	LITRE	52.07	22.83	128.0%	7.6%
Coragen (200 g/L SU)	LITRE	196.60	409.56	-52.0%	6.6%
Malathion 500 EC (500 g/l EC)	LITRE	26.85	20.14	33.3%	7.8%
Sevin XLR+ (480 g/l LI)	LITRE	31.47	28.18	11.7%	10.3%
Pounce (384 g/L EC)	LITRE	62.35	24.45	155.1%	5.7%
Matador 120EC (120 g/L EC)	LITRE	175.61	61.09	187.4%	4.9%
Delegate (25% WG)	GRAM	0.42	0.53	-21.1%	2.1%
Bravo (500 g/l SC)	LITRE	16.99	10.69	59.0%	-11.3%
Captan 80 W (80% DG)	KILOG	20.50	17.74	15.6%	-22.4%
Headline AMP (146 g/L, 55 g/L LI)	LITRE	55.14	61.81	-10.8%	-1.4%
Nova 40 W (40% WP)	KILOG	291.14	183.49	58.7%	3.0%
Caramba (90 g/L LI)	LITRE	46.72	47.03	-0.7%	-2.4%
Miravis Ace (150 g/L, 125 g/L)	LITRE	60.26	73.39	-17.9%	4.7%
Ethrel (240 g/l LI)	LITRE	22.88	10.76	112.6%	2.6%

**Exchange Rate: 1.3641**

**Seed Pricing (October 5, 2022)****Exchange Rate:** 1.3641

Commodity	Unit	Ontario (\$CAD)			U.S. (\$CAD)			Ontario vs. U.S. AVG
		MIN	MAX	AVG	MIN	MAX	AVG	
Wheat	22.7 kg	26.60	38.25	33.62	27.21	38.29	33.45	0.5%
Corn RR	80,000 seeds	270.00	370.00	320.75	286.39	486.98	391.49	-18.1%
Corn Conventional	80,000 seeds	195.00	265.00	234.72	245.47	341.03	302.82	-22.5%
Soybean RR	140,000 seeds	65.00	95.00	78.34	74.62	94.12	83.99	-6.7%
Soybean Conventional	22.7 kg	32.57	81.00	58.48	51.84	72.30	61.11	-4.3%

Commodity	Unit	U.S. (\$USD)			Ontario (\$USD)			U.S. vs. Ontario AVG
		MIN	MAX	AVG	MIN	MAX	AVG	
Wheat	50 lb	19.95	28.07	24.52	19.50	28.04	24.65	-0.5%
Corn RR	80,000 seeds	209.95	357.00	286.99	197.93	271.24	235.14	18.1%
Corn Conventional	80,000 seeds	179.95	250.00	221.99	142.95	194.27	172.07	22.5%
Soybean RR	140,000 seeds	54.70	69.00	61.57	47.65	69.64	57.43	6.7%
Soybean Conventional	50 lb	38.00	53.00	44.80	23.88	59.38	42.87	4.3%

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.