



nufarm
Evolving Ag

2020

Canadian Sunflower

Hybrid & Market Guide



Proven Performance Trusted Genetics

Nuseed's North America based nurseries are the breeding ground for superior sunflower hybrids.

HERE'S WHY:

- ✓ R&D trials are strategically located in sunflower growing areas in North America
- ✓ Nuseed is the only multinational company working with all sunflower hybrid seed types and herbicide in North America
- ✓ Industry leading sunflower molecular lab and seed production located in West Sacramento, California
- ✓ Nufarm hybrids deliver reliable yields and high oil content
- ✓ Hybrids are bred with industry-leading herbicide and disease resistance
- ✓ Strict quality assurance program

An Important Agricultural Crop

Nufarm sunflower hybrids feature advanced downy mildew resistance, Phomopsis tolerance, and herbicide tolerance to meet your field's needs. With a wide range of maturities, sizes, and oil profiles, Nufarm supports all three market segments: high oleic, NuSun® (mid-oleic), and confection. Nufarm sunflowers are tested on acres like yours, so they perform on acres like yours.



Sunflower Markets

While the vibrant, strong sunflower is recognized worldwide for its beauty, it is also an important source of healthy edible oil and protein meal. As one of the world's leading oilseed crops, sunflower oil is a valued and healthy vegetable oil. Sunflower seeds are also enjoyed as a healthy snack and nutritious ingredient to many foods.



OIL

Approximately 75% of sunflowers grown are utilized for the oil that can be extracted from the seeds. Sunflower oil is naturally made up of a combination of monounsaturated, polyunsaturated, and low levels of saturated fat. Oil sunflowers are generally classified based on their oleic (monounsaturated fat) content. Oil sunflowers that are not used for oil extraction purposes can also be used in producing high quality bird food.

Primary categories of commercially available hybrid seeds

Nusun®: Oleic levels of 55-75%

High Oleic: Oleic levels greater than 82% (common minimum crush requirement)



CONFECTION

This highly recognizable black and white seed serves as a tasty and healthy snack. Confection sunflower hybrids are planted at a lower population in the field to grow longer more plump seeds. The largest of the seeds get sold to the in-shell market, like what you eat at baseball games, while the smaller seeds are utilized in the dehull market.

Herbicide Tolerant Traits

Sunflowers are a non-GMO crop. Through years of selective breeding techniques, Nufarm has introgressed the Clearfield®, and ExpressSun® traits into the majority of our hybrids to help growers manage weeds.



Clearfield®

Production System for Sunflower

The Clearfield® Production System for sunflowers offers broad-spectrum control of grass and broadleaf weeds, including ACCase-resistant types. It pairs high-yield hybrids with Beyond® Xtra herbicide tolerance for effective postemergent weed control in any tillage system.

ExpressSun®

trait

ExpressSun® hybrids tolerate Express® herbicide, delivering broadleaf weed control, improved yield potential, and cost-effective management with full re-cropping flexibility.

High Oleic



Developed in North America, our high oleic oil sunflower hybrids deliver strong agronomics, high yields, and excellent oil content. The oilseed crush industry requires a minimum oleic level ranging from 82% to 85%.

While oleic levels can vary year to year due to environmental pressure, Nuseed sunflower hybrids target a minimum oleic level of 85% or higher, with some hybrids reaching greater than 90% oleic acid.

High oleic sunflower oil has a neutral taste and provides excellent stability without hydrogenation for the food industry and high oleic sunflower oil offers a trans fat free oil solution for end use customers. High-oleic sunflower oil is also being used in many of the new plant-based food products.

N4H161 CL

This ultra-early high oleic is the perfect hybrid for Northern climates with short growing seasons or in the High Plains for a double crop option. With a shorter plant height, N4H161 CL has excellent root strength and late season plant health.

MATURITY: Ultra-Early

MARKET: High Oleic

TRAIT: Clearfield

DMR: Yes

- Beyond Xtra herbicide tolerant
- Earliest maturity in the Nuseed lineup
- Excellent yield and oil content for maturity
- Short plant height

N4H205 E

NEW

N4H205 E is a wonderful early option for your operation, with multiple advanced Downey Mildew Resistance (DMR) genes, lightning-fast dry down, and exceptional stalk and root strength. All without sacrificing yield or oil with this early powerhouse of a hybrid

MATURITY: Early

MARKET: High Oleic

TRAIT: ExpressSun

DMR: Yes

- Excellent oil content
- Strong stalks and roots
- Fast dry down
- Advanced downy mildew resistance
- Express herbicide tolerant

N4H337 E

NEW

N4H337 E is part of Nufarm's ever evolving Express portfolio. This hybrid's outstanding plant health starts off with its resistance to all known downy mildew strains and plant health does not stop. This hybrid has a wonderful disease tolerance package that helps keep it growing strong through the season. Growers can count on high yields with this healthy hybrid.

MATURITY: Medium-Early

MARKET: High Oleic

TRAIT: ExpressSun

DMR: Yes

- Express herbicide tolerant
- Strong stalks and root strength
- Advanced downy mildew resistance
- Excellent oil

N4H302 E

N4H302 E will not disappoint. Best suited for the northern growing regions, this hybrid performs well from east to west. N4H302 E impresses producers all season long with its early season emergence and excellent oleic content at harvest.

MATURITY: Medium-Early

MARKET: High Oleic

TRAIT: ExpressSun

DMR: No

- Express herbicide tolerant
- Excellent high oleic content
- Great early season emergence
- Good late season plant health





The NuSun sunflower oil profile was developed by the U.S. National Sunflower Association, in coordination with the USDA, to create an oil essential for the food industry. NuSun oil has a naturally high smoke point and does not require trans fat creating hydrogenation to remain stable at high temperatures. It has a good shelf life and neutral taste profile making it an excellent choice for frying oil. A typical fatty acid profile is 65% oleic acid, 26% linoleic acid and 9% combined saturates.

N4HM354

The high yield potential for this medium-early hybrid and its fit from Canada to Texas make it stand out from the rest. Great oil content, resistance to multiple races of downy mildew and strong stalks are additional benefits that make N4HM354 a must have for your farm.

MATURITY: Medium

MARKET: NuSun

TRAIT: Clearfield

DMR: Yes

- Solo ADV herbicide tolerant
- Advanced downy mildew resistance
- Consistent yield, oil profile
- Great root and stalk strength
- Widely adapted across multiple growing regions

TALON

Looking for market flexibility? Talon produces a valuable grain for the bird food market while providing growers additional marketing options for dehull or crush as required. Concerned about tough growing conditions? Talon is an early hybrid with excellent stalk and root strength. Weed pressure a problem? Talon is an ExpressSun hybrid and is a versatile solution for growers.

MATURITY: Early

MARKET: NuSun

TRAIT: ExpressSun

DMR: No

- Express herbicide tolerant
- Excellent hullability and meat-to-hull ratio
- Early maturity, single-cross hybrid
- Excellent root strength

Confection



Confection sunflowers are grown to meet the specific needs of processors in the in-shell snack market.



PANTHER DMR

Panther DMR offers confection growers excellent yield potential and high test weight. Known for its very early maturity and great standability, this processor preferred hybrid with downy mildew resistance is a perfect fit for northern growers.

MATURITY: Early

MARKET: Confection

TRAIT: None

DMR: Yes

- Advanced downy mildew resistance
- Very high percentage of large seed
- High yield and test weight
- Shorter height, uniform plant type
- Very early flowering



Sunflower Hybrid Characteristics

	HIGH OLEIC			
	N4H161 CL	NEW N4H205 E	N4H302 E	NEW N4H337 E
MATURITY	ULTRA-EARLY	EARLY	MED-EARLY	MED-EARLY
TRAITS	Clearfield/ DMR	ExpressSun/ DMR	ExpressSun	ExpressSun/DMR
EMERGENCE	8	8	9	8
DROUGHT TOLERANCE	7	7	6	7
UNIFORMITY AT FLOWERING	8	8	8	9
YIELD FOR MATURITY	8	8	7	8
TEST WEIGHT	8	7	7	8
DRY DOWN	5	9	8	7
OIL CONTENT	6	9	7	8
LATE SEASON PLANT HEALTH	8	7	7	8
STALK RATING	7	8	7	8
ROOT RATING	8	8	6	7
PLANT HEIGHT	3	6	6	6

Hybrid Rating Scale 1=Poor, 9=Excellent **Plant Height Rating Scale** 1=Shortest, 9=Tallest

	NUSUN		CONFECTION
	TALON	N4HM354	PANTHER DMR
MATURITY	EARLY	MED-EARLY	EARLY
TRAITS	ExpressSun	Clearfield/ DMR	DMR
EMERGENCE	7	8	7
DROUGHT TOLERANCE	6	7	6
UNIFORMITY AT FLOWERING	8	8	7
YIELD FOR MATURITY	7	9	8
TEST WEIGHT	6	7	8
DRY DOWN	7	8	7
OIL CONTENT	5	8	N/A
LATE SEASON PLANT HEALTH	6	7	7
STALK RATING	7	8	8
ROOT RATING	8	8	7
PLANT HEIGHT	5	6	6



How many acres are in that bag?

POPULATION	OILSEED (High oleic and Nusun)		CONFECTION
	SIZE 2/3 (200,000)	SIZE 4 (225,000)	SIZE S/M/L
15,000	13.3	15.0	6.7
16,000	12.5	14.1	6.3
17,000	11.8	13.2	5.9
18,000	11.1	12.5	5.6
19,000	10.5	11.8	5.3
20,000	10.0	11.3	5.0
21,000	9.5	10.7	4.8
22,000	9.1	10.2	4.5
23,000	8.7	9.8	4.3
24,000	8.3	9.4	4.2
25,000	8.0	9.0	4.0
26,000	7.7	8.7	3.8
27,000	7.4	8.3	3.7
28,000	7.1	8.0	3.6
29,000	6.9	7.8	3.4
30,000	6.7	7.5	3.3

Sunflower Distributors

MANITOBA

ARNAUD

GJ Chemical Co. | (204) 712-5694

BEAUSEJOUR

Carl Bangert | (204) 268-4294

CARBERRY

Redfern Farm Services | (204) 834-3356

CARMAN

Bud McKnight Seeds Ltd. | (204) 745-2310

DELORAINÉ

Paterson Grain | (204) 747-2333

DUGALD

Southeast Seeds | (204) 371-2898

ELIE

Shur-Gro Farm Supplies | (204) 353-1250

GLENBORO

Jefferies Seeds | (204) 827-2102

GUNTON

Paterson Grain | (204) 886-3401

HOLLAND

Paterson Grain | (204) 526-2240

KILLARNEY

Paterson Grain | (204) 523-8936

MACGREGOR

Shur-Gro Farm Supplies | (204) 685-5685

MELITA

Paterson Grain | (204) 522-3472

MORDEN

Valleyfield Ag | (204) 362-0322

MORRIS

Paterson Grain | (204) 746-2347

NEEPAWA

Shur-Gro Farm Supplies | (204) 476-7580

NIVERVILLE

Paterson Grain | (204) 388-6565

OAKVILLE

Shur-Gro Farm Supplies | (204) 267-2701

PIERSON

Paterson Grain | (204) 634-2291

PORTAGE LA PRAIRIE

Shur-Gro Farm Supplies | (204) 857-8741

SOURIS

Fraser Ag | (204) 483-7333

ST. CLAUDE

R-Way Ag | (204) 379-2582

ST. JOSEPH

Loewen Seeds | (204) 324-7863

STEINBACH

Paterson Grain | (204) 326-4405

WESTBOURNE

Shur-Gro Farm Supplies | (204) 274-3050

WINKLER

Scouler Canada | (204) 325-9555

WINNIPEG

Bruce Stewart | (204) 633-6010

WINNIPEG TERMINAL

Paterson Grain | (204) 694-4445

ALBERTA

DUNMORE

AgroPlus Inc. | (403) 487-2906

FOREMOST

AgroPlus Inc. | (403) 867-2436

LETHBRIDGE

AgroPlus Inc. | (403) 327-7070

SCANDIA

Independent Crop Inputs | (403) 793-8611

TABER

Independent Crop Inputs | (403) 223-1325

VAUXHALL

Nutrien Ag | (403) 654-4464

ONTARIO

AMARANTH

Holmes Agro | (519) 914-0450

DOUGLAS

BDS Farms | (613) 570-0677

IONA STATION

Campbell Seed | (519) 671-9892

BUILT FOR YOUR FIELDS. EVOLVING WITH YOUR NEEDS.

The name on the front of this guide may look different, but what's behind it hasn't changed.

The people, the hybrids, and the commitment to your success remain the same. As Nuseed takes on their parent Nufarm brand, we're combining two strengths under one name – bringing you more connected solutions and a simplified experience, with the same trusted support you've always had.

At Nufarm, evolving agriculture means supporting growers with seed systems that go beyond agronomics. It means delivering hybrids that are built for local performance and backed by decades of global R&D. It means offering contract opportunities that open doors to premium markets. And it means standing behind you with expert agronomic advice, hands-on support, and clear solutions from planting to delivery.

Whether you're growing for performance, rotation, or a specialized end-use market, we're here to help you do it better and with more certainty. Our sunflower hybrids are built to meet the challenges of your region and your goals. And with investment in future-looking innovations, we're helping shape the future of oilseed crops by connecting growers to high-value, purpose-driven markets.

From top-performing hybrids to fully supported value chains, the Nufarm Seed Technologies Sunflower portfolio is evolving, just like agriculture itself. And we're proud to be evolving it with you.

If you have questions at any point in the season, our team is here to help. Please don't hesitate to reach out:

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