



HEMP SEED CATALOGUE

2025



DESIGNED TO SUCCEED

Performance-focused varieties

from seasoned innovators.

At Verve Seeds we specialize in hemp breeding, field testing, and certified seed sales of elite hemp varieties. We help develop and field test the latest and most innovative hemp genetics, to give hemp grain, fibre and cannabinoid producers dependable “fit for purpose” product performance.

TABLE OF CONTENTS

<i>TRIAL RESEARCH DATA</i>	<u>4</u>
<i>2025 GRAIN VARIETIES</i>	<u>6</u>
<i>2025 FIBRE VARIETIES</i>	<u>10</u>
<i>2025 FEMINIZED VARIETIES</i>	<u>12</u>

Designed For Success

Verve tailors seed varieties to your farm operation, supported by the largest hemp-breeding program in North America.

Full-Service Support

Our professional agronomists will guide you through your journey with hemp as you plan, plant, grow, and harvest your crop.

Trusted Quality

Our seed varieties are crafted to stringent North American standards, using protocols to ensure irreproachable quality that you can trust.

TRIAL RESEARCH DATA

Verve Seed Solutions Performance Trials

Objective

Verve Seed Solutions established a total of 6 yield performance trials across Western Canada. Site locations included Russell (MB), Melita (MB), Winkler (MB), Saskatoon (SK) Lethbridge (AB) and Coaldale (AB).

Each site was set up in a randomized complete block design with 4 replications. Seeding dates were from May 27 – June 15th, 2025.

2025 Performance Trial Multi Location Data

Variety	Lethbridge		Coaldale		Vegreville		Melita		Russell		Winkler		Saskatoon		Multilocation	
	Kg/	%chk	kg/ha	%chk	kg/ha	%chk	kg/ha	%chk	kg/ha	%chk	kg/ha	%chk	kg/ha	%chk	Mean*	Mean % CHK
CFX-2	1153	100	1485	100	661	100	1219	100	1683	100	1574	100	1369	100	1306	100
CRS-1			1697	114			1253	103	1875	111	1665	106	1467	107	1591	108
Indigo	1808	157	1287	87	1244	188	1151	94	1490	89	1865	118	2059	150	1558	126
Rak	969	84	1912	129	917	139	1380	113	1667	99	1904	121	1595	117	1478	114
EL1-140	1991	173	1362	92	1214	184	1252	103	1538	91	1535	98	2332	170	1603	130
EXP-HY-23-01	2288	199	1871	126	1515	229	1636	134	2179	130	2272	144	2493	182	2036	163
EXP-HY-23-02	1529	133	2036	137	1230	186	1718	141	2660	158	2341	149	2693	197	2030	157
EXP-HY-23-03	2722	236	2358	159	1687	255	1743	143	2353	140	2809	179	2681	196	2336	187
EXP-HY-23-05	2228	193	2157	145	1435	217	1459	120	2179	130	2114	134	2686	196	2037	162
EXP-HY-23-07	1603	139	2252	152	1209	183			2276	135	2121	135	1764	129	1871	145
EXP-HY-23-14	2027	176	2064	139	1195	181	1375	113	1715	102	1956	124	2424	177	1822	145

*2025 Verve Seed Solutions Performance Trial Data

Acknowledgements: WADO (Melita), Farming Smarter (Lethbridge), InnoTech (Vegreville), HyTech (Coaldale)

Lead Candidates

Variety Name	Sites	Multilocation Mean kg/ha	Mean % CHK
CFX-2	7	1306	100
CRS-1	5	1591	108
Indigo	7	1558	126
Rak	7	1478	114
EL1-140	7	1603	130
EXP-HY-23-01	7	2036	163
EXP-HY-23-02	7	2030	157
EXP-HY-23-03	7	2336	187
EXP-HY-23-05	7	2037	162
EXP-HY-23-07	6	1871	145
EXP-HY-23-14	7	1822	145



2025 GRAIN VARIETIES

CFX-2

Variety Purpose: Grain/Fibre

Variety Type: Open Pollinated

Description

CFX-2 is a very popular variety used in organic systems in Canada and the US. The consistently uniform plant structure and excellent harvestability of CFX-2 are valuable traits recognized by both breeders and growers. Organic growers are especially drawn to this variety because of the superior vigour during establishment, tall stature that provides excellent weed control, and ability of the plant to scavenge nutrients when soil fertility is limited.

Applications

Growers operating on dryland systems in the southern part of Canada and mid to northern regions of the USA find that grain yields are strong thanks to a larger seed size and uniform plant structure.

CFX-2	
Origin	Canada
Seed Rate Grain	25-30 lbs/acre
Seed Rate Fibre	30-45 lbs/acre
Use	Grain/Fibre
Maturity (Canada – 50 degrees latitude)	~110+ days
CBD: THC Ratio	Between 10:1
Plant height (Canada - 50-degree latitude)	130-150cm
Female to Male (average)	60% female
Growth Habit	Medium
CBD Average %	0.5%-2.7%
Oil Content	32.1
Years of Data Collected	10

Key Characteristics

- Registered in 2015
- Medium-size seed, dioecious variety
- End uses: food and fibre
- High grain yielder
- Kernel weight: 16 grams/TKW seeds
- Soil requirements: well-drained soils of medium texture are ideal
- Time of flowering: ~50 days from planting



Indigo

Variety Purpose: Grain/Flower/Fibre

Variety Type: Open Pollinated

Description

A moderately tall grain variety with an interesting look. Up to 30% of Indigo females have a distinguishing purple seed head packed with grain. With a bold terpene profile, Indigo is one on our later maturing varieties and yields very well in an extended season or more southern latitudes. Indigo can assist in spreading out your harvest season and works well as a dual-purpose crop (grain and fibre). Indigo has good shatter resistance and a large seed head that attributes to its high grain-yielding capability.

Applications

Indigo's main applications are for grain/food and flower and can be considered for dual purpose grain and fibre production.

Indigo	
Origin	Canada
Seed Rate Grain	25-30 lbs/acre
Seed Rate Fibre	35-40 lbs/acre
Use	Grain/Flower
Maturity (Canada – 50 degrees latitude)	120 days
CBD: THC Ratio (variable)	30:1
Plant height (Canada - 50-degree latitude)	100-150cm
Female to Male (average)	60% female
Growth Habit	Moderate height
CBD Average %	~3.5%
Years of Data Collected	3

Key Characteristics

- Moderate season maturity
- Large seed heads
- Day neutral tendency



Variety Name: Rak

Variety Purpose: Grain

Variety Type: Open Pollinated

Applications

Rak (New in 2024)

Description

Elevate your hemp cultivation by using our latest Open-Pollinated hemp variety from Verve Seed Solutions, Rak. This groundbreaking cultivar boasts generously sized seed heads for optimal grain yield while our superior seed shatter resistance streamlines your harvesting process for efficiency. With a focus on large, high-quality seeds, this variety exceeds industry standards. Rak’s seed heads are strategically designed not only to maximize airflow, but also to enhance disease resistance. Tolerant to herbicides and Group 2 herbicide residue, Rak offers flexibility in crop management.

Applications

Processors praise Rak for its outstanding dehulling, impressive oil content, and a smooth, buttery flavor profile that stands out in the industry. Its combination of large seed heads and a compact stature contributes to a remarkably high harvest index, positioning Rak as one of the industry's top performers. Noted for its early-season vigour and the ability to suppress weeds with substantial biomass, Rak is a proven winner in organic systems. It performs exceptionally under irrigation, suiting it to a wide range of cultivation practices.

Rak	
Origin	Canada
Seeding Rate lbs/acre	25-30
Use	Grain
Maturity at 50 Degree Latitude	115 Days
Plant Height at 50 Degree Latitude	130-160cm
Female to Male % (avg)	55% F
Growth Habit.	Moderate
CBD % (Avg)	.5-2.7%
Oil Content	34.0%

Key Characteristics

- New variety for 2024!
- Increased herbicide tolerance
- Outstanding dehulling yields
- Top grain yield
- Very large seed size
- Early to moderate maturity





2025 FIBRE VARIETIES

Jurassic

Variety Purpose: Fibre

Variety Type: Dioecious

Description

Jurassic is the first fibre specific variety coming from the Verve Breeding program. This variety is a true biomass monster to meet the needs of the Fibre (bast and hurd) industry! Limited seed availability for 2025.

Applications

Jurassic is a Fibre specific variety.

Jurassic	
Origin	Canada
Seed Rate Grain	NA
Seed Rate Fibre	30-45 lbs/acre
Use	Fibre
Maturity (Canada – 50 degrees latitude)	125 + days
CBD: THC Ratio	NA
Plant height (Canada - 50-degree latitude)	4 m
Female to Male (average)	NA
Growth Habit	Uniform Upright Very Tall
CBD Average %	NA
Commercial seed	Available 2024
Years of Data Collected	3

Key Characteristics

- Flowers beginning of September
- Up to 4 meters in height
- Ideal for green fibre harvest
- Minimal branching
- Excellent internode spacing for long fibre applications





2025 FEMINIZED VARIETIES

CBF1

Variety Purpose: Flower Production

Variety Type: Hybrid

Description

CBF1 is a photoperiod-sensitive, long-season hybrid with flower production yielding up to 10% CBD and a CBD:THC ratio of 30:1.

Applications

CBF1 is used for flour/CBD purposes.

CBF1	
Origin	Canada
Seed Rate Flower	2500-3000 plants/acre
Flower Yield	1-1.5 lb/plant
Use	Flower
Maturity (Canada – 50 degrees latitude)	Photo period late maturing
CBD: THC Ratio (variable)	30:1
Plant height (Canada - 50-degree latitude)	183cm
Female to Male (average)	99% feminized
Growth Habit	Bushy
CBD Average %	Up to 10%
Years of Data Collected	3

Key Characteristics

- First high-CBD feminized hemp hybrid approved by Health Canada
- Developed through extensive crossing and selection pressure
- Photoperiod sensitive late season
- Flower initiation begins early September
- 99% feminized
- Ideal for blending and product formulation
- Terpenes exhibit floral and fruity notes with earthy undertones



Ambassador

Variety Purpose: Flower Production

Variety Type: Hybrid Autoflower

Description

From the Charlotte's Web breeding team, a Verve strategic partner, comes *Ambassador*—a new hemp variety for those who need a short-season performer. Ambassador is an autoflower, meaning flowering initiates before the days get shorter.

Applications

CBD Extraction is the main purpose of this variety.

CBF1	
Origin	USA
Use	Flower
Maturity (Canada – 50 degrees latitude)	Auto flower 9 weeks from planting to harvest
CBD: THC Ratio (variable)	28:1
Plant height (Canada - 50-degree latitude)	91cm
Female to Male (average)	99% feminized
Growth Habit	Short compact with numerous branching
CBD Average %	Up to 9%
Seeding Rate	10,00- 15,000 plants/acre

Key Characteristics

- 25 days to flower after seeding
- 65 days to harvest after seeding
- 2-3ft tall plants dependent on plant density
- Sweet earthy aroma with hints of pine
- Major terpenes beta-caryophyllene, alpha-bisabolol, guaiol, alpha-humulene, fenchol, beta-myrcene
- Short compact structure can be planted at high density



Umpqua

Description

Umpqua is a mid-season feminized CBD hemp cultivar developed by Arcadia Biosciences, a Verve strategic partner. Verve is excited to deliver growers this early flowering cultivar with significantly increased production returns, excellent vigour, uniform plant type, high flower yields, and CBD content up to 10%.

Applications

CBD Extraction is the main end use of this variety.

Umpqua	
Origin	USA
Use	Flower
Maturity (Canada – 50 degrees latitude)	Photo period neutral
CBD: THC Ratio (variable)	30:1
Plant height (Canada - 50-degree latitude)	180 cm
Female to Male (average)	99% feminized
Growth Habit	Bushy
CBD Average %	Up to 10%
Flower Yield	1.5-2 lbs/plant
Seeding rate	2,500-3,000 plants/acre

Key Characteristics

- Photoperiod neutral parent, quick to flower and an early finisher
- Photoperiod sensitive, mid-season hybrid ready for harvest in mid to late September
- Terpenes: Caryophyllene, myrcene and guaiol give an intense peppery aroma with a piney finish
- Derived through extensive inbreeding to derive homozygous parents





RAISING EXPECTATIONS

Expert support from

experienced agronomists.



High Performance Hemp



Jeff Kostuik, General Manager
(204) 821-0522 jeff@verveseeds.com



Jayme Hunter, Chief Operating Officer
(403) 846-6383 jayme@verveseeds.com