

AB BREWNET

VARIETY HIGHLIGHTS:

- Moderate protein and plump kernels
- Test weight and kernel weight similar to checks
- Moderate enzymatic activity, similar to AAC Synergy and CDC Copeland
- High FAN, similar to AC Metcalfe
- Higher β -amylase, similar to AAC Synergy

AB BrewNet is a spring two-row, hulled malting barley variety, registered in Canada in 2022. A cross of J06018 F1 and Merit; it was developed by Dr. Patricia Juskiw, Alberta Agriculture and Forestry, Lacombe, Alberta

All barley varieties in Canada undergo a rigorous process of evaluation prior to registration, and are required to meet minimum agronomic, disease and quality standards established by check varieties. The following are highlights of the results of the Cooperative and Collaborative trials taken from the breeder's registration application.

AGRONOMIC TRAITS:

- High yields, 1% higher than AAC Synergy
- Lower protein and plump kernels, good resistance to shattering
- Good lodging resistance - better than AAC Synergy
- Slightly longer season than checks
- MR for smuts, and scalds
- Moderate Resistance for FHB and low DON accumulation
- Fair tolerance to drought

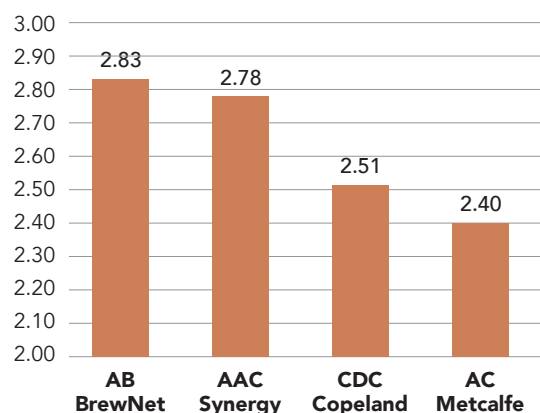
The tables below provide yield and disease comparisons of AAC Connect with control varieties. Producers should check their provincial seed guides for more information on new varieties.

GENETIC DISEASE RESISTANCE

	AC Metcalfe	CDC Copeland	AAC Synergy	AB BrewNet
Scald	MS-S	MS-S	S	I
Spot form net blotch	I	I	R	I
Net form net blotch	S	I	MR	MS
Spot blotch	I	S	R	I
FHB	I	I	I	MR

S = susceptible; MS = moderately susceptible, I = intermediate resistance, MR = moderate resistance, R = resistant

YIELD COMPARISON (TONNE/ACRE)



From breeder registration submission

YIELD DATA (BUSHEL/ACRE)

2023 SaskSeed Guide			2023 Alberta Seed Guide		2023 Manitoba Seed Guide	
% of AAC Synergy	Area 1 & 2	Area 3 & 4	% of CDC Copeland*		% of AAC Synergy**	
AAC Synergy	100	100	AAC Synergy	106	AAC Synergy	100
AAC BrewNet	97	100	AAC BrewNet	107	AAC BrewNet	94
CDC Copeland	92	93	CDC Copeland	100	CDC Copeland	88
AC Metcalfe	87	86	AC Metcalfe	99	AC Metcalfe	87

*Base CDC Copeland yield 110 bushels per acre; **Base AAC Synergy yield 111 bushels per acre

QUALITY & PERFORMANCE RESULTS FROM CMBTC 2020-2022 WESTERN CANADIAN FIELD TRIALS

Once varieties have been registered in Canada the CMBTC collects samples annually to evaluate barley & malt quality differences between new and established varieties. These trials are performed to help support new varieties toward market acceptance. The data below represents 3-year averages from 2020-2022 of barley samples sourced from multiple sites across western Canada from the CMBTC's Western Canadian Field Trials.

Table 1. Barley Quality Data

AB BrewNet shows comparable malt barley quality to the control samples.

	AC Metcalfe	CDC Copeland	AAC Synergy	AB BrewNet	p-value by variety*
n	70	70	70	70	
Protein %	13.5	12.9	12.7	13.5	0.0244
Germination Energy %	91.6	94.1	94.3	91.3	0.2535
Water Sensitivity %	74.7 b	83.2 a	82.2 ab	77.4 ab	0.0264
Thousand Kernel Weight, grams	43.9	44.7	45.9	44.0	0.0782
Plumpness %	91.9	91.2	93.4	91.0	0.4490
SN RVU	116	128	122	118	0.7408

Table 2. Malt Quality Data

AB BrewNet shows desirable malt quality like the controls. AB BrewNet has lower levels of diastatic power like CDC Copeland, while α -amylase levels are not statistically different from the checks.

	AC Metcalfe	CDC Copeland	AAC Synergy	AB BrewNet	p-value by variety*
n	70	70	70	70	
Moisture %	4.1	4.0	4.1	4.2	
Friability %	76.6	83.2	83.2	78.0	0.0394
Protein %	13.47	12.94	12.70	13.64	0.3737
Fine Extract % db	80.0	79.6	80.7	79.2	0.0924
Diastatic Power °L	177 a	154 b	157 ab	156 b	0.0082
α -Amylase DU	84.3 a	69.0 b	81.1 a	79.5 ab	0.0084
Soluble Protein %	5.76	5.62	5.76	5.68	0.9469
S/T Ratio %	43.2	43.7	45.9	42.2	0.2237
FAN mg/L	227	146	103	141	0.2972
Colour SRM	3.11	2.68	2.94	2.87	0.8831
β -Glucan mg/L	127	146	103	141	0.2972
Viscosity cP	1.48	1.47	1.45	1.46	0.2729

*A p value <0.05 indicates statistical significance between values.

Letter display generated by Tukey's test. Varieties not connected by the same letter are significantly different.

For more information:
Visit cmbtc.com or contact:
Peter Watts, Managing Director
pwatts@cmbtc.com or 204 983 1981



The CMBTC does not offer advice or recommendations with respect to production or marketing decisions to the barley industry, and this information should not be construed as such.

