



AB BREWNET

Two-row malting barley

- Yields 1% higher than AAC Synergy, 8% higher than CDC Copeland
- Moderate resistance to FHB with DON levels
 27% lower than the best check
- Malting quality similar to CDC Copeland with lower DP and higher extracts

Strengths of AB BrewNet

- Grain yield is 102 to 121% of the malt check CDC Copeland across all soil zones of western Canada. Overall yields are 1% higher than the malt check AAC Synergy.
- Good low protein malting type with lower diastatic power, high fine extract. Most
 malting quality traits settle between the checks including friability, grain peeling, alphaamylase, beta-glucan, viscosity and FAN. Lower DMS/DMSP than CDC Copeland.
 Malting profile is suitable for the craft and low adjunct brewing industries.
- Good lodging resistance, with scores slightly better than the best malting check AAC Synergy and similar to the feed check CDC Austenson.
- Moderately resistant to the surface-borne smuts, stem rust, and FHB.
- DON is 27% less than AC Metcalfe (in 6 location years).
- Intermediate resistance to the spot-form of net blotch and scald.
- Test weight, kernel weight and percent plumps are similar to the malting checks.

AB BrewNet was developed by Western Crop Innovations and is available through <u>SeedNet Inc.</u>

Table 1. Mean grain yield of AB BrewNet by soil zone in the 2016 and 2017 Western Cooperative Two-Row Barley Registration Trials.

	Black ¹		Black & Grey ²		Brown ³		Overall	
Entry	kg/ha	% CDC Copeland	kg/ha	% CDC Copeland	kg/ha	% CDC Copeland	kg/ha	% CDC Copeland
Littiy	Kg/Ha	Copelaria	Kg/Ha	Copeland	Kg/Ha	Copelaria	Kg/Ha	Copelatio
CDC Copeland	5801	100	7689	100	5603	100	6239	100
AC Metcalfe	5876	101	7351	96	5281	94	6012	96
AAC Synergy	6638	114	8083	105	5864	105	6682	107
CDC Austenson	6874	119	8090	105	6111	109	6858	110
AB BrewNet	6403	110	8507	111	5912	106	6764	108
Station Years	8		9		15		32	

¹Manitoba and Saskatchewan ²Alberta and BC ³Alberta and Saskatchewan.

Table 2. Agronomic traits of AB BrewNet averaged over the 2016 and 2017 Western Cooperative Two-Row Barley Registration Trials.

Entry	Heading days	Maturity days	Height cm	Lodging 1-9	Test Wt kg/hL	Kernel Wt mg	Plump >6/64 %	Thins <5/64 %
CDC Copeland	59.3	91.7	86.6	2.4	63.8	44.8	90.7	1.14
AC Metcalfe	56.6	91.1	80.1	4.1	64.9	42.7	90.1	1.45
AAC Synergy	56.9	91.7	80.0	2.7	62.5	45.9	93.5	0.78
CDC Austenson	58.8	92.8	80.8	2.1	66.3	45.2	89.6	1.70
AB BrewNet	59.8	94.3	87.6	2.1	64.4	44.4	90.1	1.69
Station Years	29	26	31	10	31	28	27	13

Lodging score 1-9, 9 being up to 100% lodged.

Table 3. Malting quality of AB BrewNet averaged over the 2016-2017 Western Cooperative Two-Row Barley Registration Trials and the 2017 Barley Collaborative Trials.

Entry	Friability %	P&B %	Protein %	DP °L	a Amyl D.U.	F. Ext. %	Sol. P. %	Kol. Index %	eta -Glucan ppm	FAN mg/L
2016-2017*										
CDC Copeland	91.2	5.5	11.2	125	67.9	80.7	4.60	41.2	104	174
AC Metcalfe	82.8	6.3	11.8	151	96.1	81.4	4.87	41.3	124	206
AAC Synergy	93.5	5.9	11.6	133	85.5	81.4	4.80	41.6	59	191
AB BrewNet	91.0	4.0	11.2	131	93.4	81.9	4.88	43.8	82	207
2017-2018 [†]										
CDC Copeland	82.0	2.2	12.0	167	65.4	80.7	4.84	40.5	93	189
AC Metcalfe	76.7	2.2	12.3	169	69.9	80.9	4.95	40.2	105	199
AAC Synergy	78.3	2.6	12.3	170	71.3	80.7	4.92	40.2	95	187
AB BrewNet	79.2	2.8	12.3	152	67.3	80.9	4.82	39.2	100	197

^{* -} mean of 6 sites. † - mean of 10 sites; P and B - peeled and broken; DP - diastatic power; F. Ext. – fine extract; Sol. P. - soluble protein; Kol. Index – Kolbach index; FAN – free amino nitrogen.

Table 4. Overall disease ratings of AB BrewNet from the 2017 Western Cooperative Two-Row Barley Registration Trials.

	Net E	Blotch			Smut			
Entry	Net Form	Spot Form	Scald	Spot Blotch	Loose	Surface	Stem Rust	FHB
AC Metcalfe	S	I	S	I	R	MR	R-MR	I
CDC Copeland	I	I	S	S	I	MR	MR	1
AAC Synergy	MR	MR	S	MR-I	S	MR-I	I	I
AB BrewNet	MS	1	I	MS	MS	MR	MR	MR

 $R-resistant, MR-Moderately\ resistant, I-intermediate\ resistance, MS-moderately\ susceptible, S-susceptible. FHB-fusarium\ head\ blight.$