

Malting quality data for all-malt elite lines entering the production pipeline 2021–22*

Season	Line	Kernel weight (mg)	On 6/64" (%)	Barley color (Agtron)	Malt extract (%)	Wort color	Wort clarity	Barley protein (%)	Wort protein (%)	S/T (%)	DP (°ASBC)	Alpha-amylase (20°DU)	Beta-glucan (ppm)	FAN (ppm)
2019–20 [†]	RIL0209-031	37.9	94.5	69	81.0	1.6	1	11.9	4.41	39.3	149	65.4	243	184
	RIL0214-017	40.0	95.9	73	82.6	1.4	2	12.8	4.44	37.4	198	69.9	510	189
	RIL02JY-084	36.8	91.8	76	82.4	1.3	2	12.6	4.16	35.1	156	63.3	328	158
	RIL02JY-089	39.8	95.9	57	80.4	n.d.	3	11.6	4.28	39.2	102	67.9	519	164
	RIL02JY-090	45.9	99.5	60	81.2	n.d.	3	11.8	4.61	40.3	174	76.6	222	157
	RIL02JY-094	41.6	96.1	56	80.4	1.5	1	10.0	4.34	45.1	114	60.9	449	185
	RIL02JY-097	35.5	94.4	63	83.9	1.6	1	11.4	4.57	42.1	122	73.5	252	183
	RIL02JY-098	45.0	98.9	57	80.9	1.6	2	11.0	4.24	41.9	119	66.2	223	176
	RIL02JY-100	39.0	93.3	59	80.5	1.4	1	12.2	4.11	36.2	159	65.5	340	172
	RIL02SA-032	39.0	95.9	58	81.9	1.3	1	12.2	5.24	45.3	204	65.2	105	162
	Scala [§]	37.0	93.9	52	83.0	1.5	1	12.3	4.53	38.5	206	78.4	170	208
2020–21 ^{††}	RIL523FV-033	43.0	97.4	54	83.4	1.6	1	9.8	4.87	54.9	110	85.0	329	188
	Endeavor [§]	32.6	87.9	53	81.4	2.0	1	10.3	5.03	52.4	145	97.7	312	217
	Scala	42.3	98.0	50	81.6	2.3	2	9.0	4.52	52.2	102	47.0	152	163
	Violetta	38.4	96.4	55	80.7	1.8	1	9.3	4.33	50.6	106	46.0	152	150
	Wintmalt	39.2	96.9	48	80.9	1.9	1	10.4	4.99	49.3	156	62.3	167	190

* Malting quality was assessed by the USDA Cereal Crops Research Unit in Madison WI, which uses steeping, germination, and kiln cycle schedules designed to produce adjunct lager type malts. Altering those schedules and parameters may bring other quality parameters much closer to desired ideal levels.

[†] Malting quality data is from the line grown in Wooster the 2019–20 season.

^{††} Malting quality data is from the line grown in Wooster the 2020–21 season.

[§] For comparative purposes, the malting quality data for standard commercially available varieties grown in parallel, is also provided.