

Malting quality data for elite lines in production plots for pilot malting and brewing 2022*

Site [†]	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)
WO	DH02FL-028	38.1	97.9	56	79.9	1.2	1	10.3	4.77	48.8	143	48.7	190	141
	RIL02FL-029	38.0	95.5	59	80.5	2.2	2	10.1	4.81	51.0	167	44.9	178	183
	RIL02WI-013	41.4	97.8	49	79.3	2.3	2	10.0	4.61	49.4	136	55.9	235	156
	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
	NW	DH02FL-028	34.8	93.7	60	79.4	1.5	2	11.8	5.30	46.2	147	50.9	292
RIL02FL-029	38.1	85.8	64	80.1	2.0	2	11.9	5.48	48.0	175	45.2	541	171	
RIL02WI-013	41.1	96.7	51	78.8	2.3	2	12.0	5.58	50.6	163	63.7	383	189	
NC	Endeavor	34.0	82.3	61	80.8	1.9	1	10.9	5.83	57.3	153	*98.0	464	220
	Violetta	37.2	89.4	59	80.0	1.4	1	11.0	5.32	48.7	124	54.4	454	170
	Wintmalt	39.9	96.5	56	81.3	1.6	1	11.3	5.87	55.4	187	65.0	412	203
	DH02FL-028	37.5	96.4	54	77.6	1.3	1	13.8	5.11	38.5	157	53.5	213	152
	RIL02FL-029	42.4	98.0	57	79.1	1.5	2	13.5	5.02	38.0	180	39.8	468	164
WE	RIL02WI-013	41.9	96.8	47	77.8	1.9	1	13.1	4.93	39.7	137	49.6	240	161
	Endeavor	35.3	91.1	53	80.4	4.5	1	11.7	7.21	64.1	100	67.7	378	295
	Violetta	43.9	98.0	54	80.4	1.5	1	11.8	5.65	49.0	139	52.4	400	195
	Wintmalt	43.0	98.0	46	79.5	1.6	1	13.4	6.11	47.1	212	61.9	455	222
	DH02FL-028	37.6	93.4	57	77.1	1.4	1	13.1	4.55	37.2	68	41.2	312	145
WE	RIL02FL-029	39.2	89.6	61	79.0	1.9	1	12.3	4.76	39.1	87	40.3	510	155
	RIL02WI-013	40.2	94.7	50	77.5	1.8	2	13.0	5.08	39.3	101	58.0	641	172
	Endeavor	33.6	76.1	54	78.8	1.7	1	12.8	5.19	44.0	116	*97.2	375	207
	Violetta	39.3	92.3	61	77.9	1.6	1	13.1	4.82	39.4	79	45.1	510	175
	Wintmalt	39.8	93.3	55	78.1	1.6	1	13.4	5.14	40.9	116	55.1	475	189

*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 lines grown the 2020–21 season at four sites: WO = Wooster, NW = Northwest (Custar), NC = North Central (Fremont), WE = Western (South Charleston).

^{††}For comparative purposes, the malting quality data for standard commercially available varieties grown in parallel, is also provided.