

Regina - Submitted by Rebecca Jennings, Origin Malt

Regina is a German Bred Winter Variety from Bruen. It was first brought to market in Germany in 1996 and by 1997 held 22% of the market share in the UK. In 2018 Breun worked with Eric Stockinger at OSU to bring several of their lines to the US. Origin Malt reviewed these varieties and worked closely with Bruen to move Regina forward for commercial production. Origin Malt had breeders seed imported from Germany for the 2020 crop, and planted Regina in MI and OH. The yield was quite low as Ohio and MI had a very late season freeze that stunted the filling of the grain. However, the quality was acceptable (see below). In 2020, Regina was planted in multiple locations to learn geographically where it would perform well. Origin malt currently has 100+ acres of Regina in the ground for seed increase and will be malting several MT from the 2021 crop for customer trials.

Depending on the location and the fertility of the soil, Regina is very versatile. Interestingly when put in a stressful environment such as the late freeze that was experienced in 2020, the aleurone will appear blue in color. This does not translate to anything in beer, just an interesting observation. Avg yield for 2020 crop was 25 bu/acre. Avg harvest date was June 26, 2020.

2020 Micromalting Data

Description	MIR	OHR	Average
Moisture	3.9	3.9	3.9
Friability	82.6	91.2	86.9
FEDB	76.6	80.4	78.5
CEDB	75.0	79.5	77.3
F-C Diff	1.6	0.9	1.3
Color	1.66	1.69	1.7
β -glucan	147	109	128.0
TP	13.9	11	12.5
SP	5.58	5.16	5.4
S/T	40.1	46.9	43.5
FAN	232	223	227.5
DP	146	146	146.0
α -amylase	56.5	53.6	55.1
Filtration	normal	normal	normal
Clarity	clear	clear	clear
pH	5.88	5.84	5.9
>7/64	72.0	84.0	78.0
>6/64	27.0	15.0	21.0
>5/64	1.0	1.0	1.0
<5/64	0.0	0.0	0.0
GE 4	99	97	98.0
GE 8	83	84	83.5

2020 Barley Quality Data

	2020 Crop 1 MI	2020 Crop 2 MI	2020 Crop OH 1	2020 Crop OH 2
	10 acres	10 acres	10 acres	10 acres
Moisture	13.80	14.28	14.78	13.82
Protein	10.12	13.62	13.54	10.75
Test Weight	47.56	41.29	45.30	49.49
chaff	0.1	0.1	0.1	0.1
Thru	0.4	0.5	0.6	0.3
5/64	1.1	2.3	1.1	0.9
5.5/64	5.1	7.1	5.8	2.6
6/64	57.6	54.9	53.0	50.4
7/64	35.7	35.1	39.4	45.7
Plump	93.3	90.0	92.4	96.1
Thin	1.6	2.9	1.8	1.3
GC	94	99	99	99
DON	0.00	0.00	0.00	0.23
Heat damage %	0	0	0	0
FM %	0	0	0	0
Frost %	4	3	8	6
Green %	0	0	5	0
S&B (<5%)	0.0	0.0	0.0	0.0
Notes	100% blue aluerone	visual mold in creases on kernel after 24 hours germination - 85% blue aluerone	90% blue aluerone	85% blue

2021 Barley Quality Data

Sample	1	2	3	4	5
MOISTURE (<13.5%)	13.03	13.94	18.33	13.45	13.91
PROTEIN (9%-13%)	9.49	10.33	9.74	10.5	10.03
STARCH	53.46	54.09	52.41	54.41	54.63
TEST WEIGHT (>48 lb/bu)	43.6	48.43	48.18	47	48.83
CHAFF (<2%)	0.1	0	0.1	0	0
THRU 5/64	0.3	0.4	0.7	0.3	0.4