OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

2016 Grape Maturity at OSU-Wooster and AARS-Kingsville Research Vineyards

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In 2015, the OSU Viticulture Program implemented a new outreach activity by posting fruit ripening progression of grape varieties grown at the OSU research vineyards on the program website, “Buckeye Appellation” (ohiograpeweb.cfaes.ohio-state.edu). Based on many testimonials, the service was well received by members of the industry. As a result, the Viticulture Program will continue to share fruit ripening of varieties grown at the research vineyards during the 2016 season. At the Wooster vineyard, we have began sampling last week and the following table summarizes the results. The date of berry sampling and corresponding heat units or growing degree days (GDD) are included. GDD is a more accurate indicator of fruit ripening than the calendar date and measures the heat accumulation at the Wooster location. The GDD in your location could be higher or lower than that at our site. Typically, at the Wooster research vineyard, grape ripening of similar varieties is about 1 to 2 weeks behind central and southern Ohio, and 1 to 2 weeks ahead of more northern latitude vineyards and on Lake Erie shores. To learn more about monitoring fruit maturity and berry sampling, please read OSU factsheet at the following link: Are your grapes ready to pick? . As always, please contact Dr. Imed Dami (dami.1@osu.edu) if you have questions regarding this.

Grape maturity of grape varieties at the Wooster research vineyard in 2016:

(1) Sampling Date: 8/8/2016 (GDD=1915)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Chardonnay	114	11.6	2.75	23.1	5
Frontenac	116	14.5	2.82	28.1	5
La Crescent	113	16.1	2.77	26.6	6
Marguette	145	17.3	2.79	15.5	11
Regent	178	13.1	2.98	16.2	8

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Grape maturity of grape varieties at the Wooster research vineyard in 2016:

(2) Sampling Date: 8/15/2016 (GDD=2103)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Chardonnay	151	15.2	2.87	14.4	11
Frontenac	131	16.9	2.86	20.9	8
La Crescent	139	18.6	2.80	20.1	9
Marguette	165	19.0	2.75	17.7	11
Regent	200	14.5	2.98	13.2	11

(3) Sampling Date: 8/22/2016 (GDD=2271)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Aromella	172	14.1	2.50	13.4	11
Chardonnay	159	17.6	2.79	10.4	17
Chambourcin	202	15.2	2.69	16.2	9
Frontenac	136	18.3	2.94	17.4	11
LaCrescent	137	19.9	2.63	18.3	11
Marquette	172	21.5	2.69	11.0	20
Regent	222	16.4	2.86	11.1	15
Sauvignon blanc	182	16.2	2.66	14.9	11
Traminette	182	15.7	2.48	18.6	8

*SS: soluble solids, which estimate sugar concentration in grape juice using a refractometer.
pH: measures active acidity (strength of H+ ions) in grape juice using a pH meter.
TA: titratable acidity, or total acidity, measures actual amount of organic acids in grape juice.
SS/TA: fruit ripening index.

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Grape maturity of grape varieties at the Wooster research vineyard in 2016:

(4) Sampling Date: 8/30/2016 (GDD=2452)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Aromella	182	15.8	2.78	11.4	14
Cabernet franc	153	18.4	2.96	7.3	25
Chambourcin	220	17.3	2.87	12.2	14
Chardonnay	155	20.1	3.11	8.7	23
Frontenac	142	20.9	3.00	16.2	13
La Crescent	141	21.8	2.86	16.8	13
Marquette	168	23.7	3.02	12.2	20
Regent	223	17.8	3.23	9.3	19
Riesling	156	18.0	2.86	11.3	16
Sauvignon blanc	181	17.3	2.97	11.4	15
Traminette	180	18.8	2.84	13.2	14

(5) Sampling Date: 9/6/2016 (GDD=2577)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Aromella	178	17.8	2.92	9.9	18
Cabernet franc	168	19.6	3.16	6.9	28
Chambourcin	221	19.5	2.87	11.1	18
Chardonnay	157	21.5	3.14	7.5	29
Frontenac	133	22.1	3.15	14.4	15
La Crescent	146	24.6	2.96	15.3	16
Marquette	161	24.8	3.02	11.9	21
Regent	236	19.3	3.30	7.7	25
Riesling	164	17.3	2.86	10.8	16
Sauvignon blanc	195	20.5	3.07	10.1	20
Traminette	186	21.0	2.90	10.8	19

*SS: soluble solids, which estimate sugar concentration in grape juice using a refractometer.
pH: measures active acidity (strength of H+ ions) in grape juice using a pH meter.
TA: titratable acidity, or total acidity, measures actual amount of organic acids in grape juice.
SS/TA: fruit ripening index.

Grape maturity of grape varieties at the AARS-Kingsville research vineyard in 2016:

Sampling Date: 9/7/2016 (GDD=2425)

Variety	SS (%)	pH	T.A. (g/L)	SS/TA*10
Chardonnay	17.9	3.16	11.3	16
Pinot gris	17.0	3.20	12.3	14
Pinot noir	17.0	3.30	9.2	19
Regent	18.0	3.27	9.2	20