

2023 Grape Maturity at OSU Research Vineyards

Imed Dami, Diane Kinney, Bailey Miller, Andy Kirk. The Ohio State University.

Thanks to the continuous interest by Ohio growers and vintners and support by the Ohio Grape Industries Committee, we are pleased to resume monitoring fruit maturity progression of varieties grown at the research vineyards during the 2023 season. This information will be sent weekly to OGEN subscribers and posted on the program website, [Buckeye Appellation](#). The date of berry sampling and corresponding heat units or growing degree days (GDD) are included. Note that the GDD in your location could be higher or lower than that at our sites. For example, at the Wooster research vineyard, grape ripening of similar varieties is typically 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 determine the GDD in your location, visit the [OSU-GDD Calculator](#). To learn more about monitoring fruit maturity and berry sampling, please read OSU factsheet at the following link: [Are your grapes ready to pick?](#) Click here for [Fruit maturity from previous years](#). We wish you bountiful and successful harvest!!

Grape maturity of grape varieties at the *Wooster* research vineyard:

(1) Sampling Date: 8/14/2023 (GDD=1829)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Brianna		226	14.9	3.06	9.0	17
Einset		188	16.0	2.90	8.5	19
Marquis		168	16.6	2.80	9.1	18
Jupiter		169	11.0	2.97	12.8	9
Regent		202	14.6	2.93	13.4	11
Vanessa		212	17.6	3.02	6.8	26

*SS: soluble solids, which estimates sugar concentration in grape juice.

pH: measures active acidity (strength of H⁺ ions) in grape juice using a pH meter.

TA: titatable acidity, or total acidity, measures actual amount of organic acid reserve in grape juice.

FMI: fruit maturity index = SS/TA*10.



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(2) Sampling Date: 8/21/2023 (GDD=1947)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Brianna	21-Aug	233	17.1	3.37	4.9	35
Einset		231	17.3	3.13	5.26	33
Itasca		148	17.1	3.10	13.0	13
Jupiter		402	17.0	3.09	8.9	19
Marquis		384	12.8	3.01	8.5	15
Regent		210	16.9	3.05	11.2	15
Vanessa		258	18.7	3.29	4.8	39

(3) Sampling Date: 8/28/2023 (GDD=2048)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay		170	15.9	2.97	13.30	12
Einset		244	17.7	3.13	4.73	37
Itasca		156	18.8	3.13	11.1	17
Jupiter		422	18.7	3.22	6.4	29
Marquis		384	13.5	3.06	6.3	21
Regent		212	16.4	3.09	9.1	18
Vanessa	24-Aug	243	18.8	3.23	5.0	38

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(4) Sampling Date: 9/5/2023 (GDD=2182)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay		175	16.2	2.40	11.2	14
Einset	30-Aug	248	18.4	3.20	4.1	45
Itasca		138	20.6	3.20	10.4	20
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Regent		224	18.8	3.21	7.5	25
Vanessa	24-Aug	243	18.8	3.23	5.0	38

(5) Sampling Date: 9/11/2023 (GDD=2343)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay		174	19.6	3.11	10.3	19
Clarion - MN 1220		144	22.0	3.34	10.1	22
Crimson pearl		212	19	3.27	7.8	24
Einset	30-Aug	248	18.4	3.20	4.1	45
Frontenac blanc		130	22.0	3.18	14.7	15
Itasca		276	20.6	3.20	10.4	20
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Petite Pearl		122	20.0	3.29	8.6	23
Regent		220	18.8	3.38	6.55	29
Vanessa	24-Aug	243	18.8	3.23	5.0	38

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(6) Sampling Date: 9/18/202 (GDD=2405)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		166	19.5	3.16	11.4	17
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay		198	20.3	3.28	10.2	20
Clarion - MN 1220		174	23.2	3.41	9.7	24
Crimson pearl		220	19.6	3.34	7.2	27
Einset	30-Aug	248	18.4	3.20	4.1	45
Frontenac blanc		129	23.0	3.28	13.5	17
Itasca	12-Sep	145	21.8	3.54	8.5	26
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Petite Pearl		120	22.3	3.44	8.5	26
Regent	14-Sep	225	20.0	3.31	8.1	27
Vanessa	24-Aug	243	18.8	3.23	5.0	38

(7) Sampling Date: 9/25/2023 (GDD=2476)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		166	20.4	3.20	11.3	18
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay	20-Sep	199	20.8	3.24	10.5	20
Clarion - MN 1220	21-Sep	216	19.0	3.30	7.7	27
Crimson pearl	20-Sep	229	20.4	3.40	6.8	30
Einset	30-Aug	248	18.4	3.20	4.1	45
Frontenac blanc	19-Sep	134	22.9	3.17	15.0	15
Itasca	12-Sep	145	21.8	3.54	8.5	26
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Petite Pearl		122	23.7	3.36	7.5	32
Regent	14-Sep	230	19.9	3.28	8.0	28
Vanessa	24-Aug	243	18.8	3.23	5.0	38



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(8) Sampling Date: 10/2/2023 (GDD=2561)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		164	20.6	3.20	10.6	19
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay	20-Sep	199	20.8	3.24	10.5	20
Clarion - MN 1220	21-Sep	216	19.0	3.30	7.7	27
Crimson pearl	20-Sep	229	20.4	3.40	6.8	30
Einset	30-Aug	248	18.4	3.20	4.1	45
Frontenac blanc	19-Sep	134	22.9	3.17	15.0	15
Itasca	12-Sep	145	21.8	3.54	8.5	26
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Petite Pearl	26-Sep	125	23.8	3.47	8.5	28
Regent	14-Sep	230	19.9	3.29	8.0	28
Vanessa	24-Aug	243	18.8	3.23	5.0	38
Verona	20-Sep	237	19.4	3.26	6.5	33

(9) Sampling Date: 10/5/2023 (GDD= 2611)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	5-Oct	167	21.6	3.19	8.7	25
Brianna	21-Aug	233	17.1	3.37	4.9	35
Chardonnay	20-Sep	199	20.8	3.24	10.5	20
Clarion - MN 1220	21-Sep	216	19.0	3.30	7.7	27
Crimson pearl	20-Sep	229	20.4	3.40	6.8	30
Einset	30-Aug	248	18.4	3.20	4.1	45
Frontenac blanc	19-Sep	134	22.9	3.17	15.0	15
Itasca	12-Sep	145	21.8	3.54	8.5	26
Jupiter	31-Aug	402	19.4	3.25	6.4	30
Marquis	6-Sep	437	15.4	3.10	5.1	30
Petite Pearl	26-Sep	125	23.8	3.47	8.5	28
Regent	14-Sep	231	20.0	3.29	7.8	28
Vanessa	24-Aug	243	18.8	3.23	5.0	38
Verona	20-Sep	237	19.4	3.26	6.4	33

Grape maturity of grape varieties at the ***Kingsville*** research vineyard:

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(1) Sampling Date: 9/1/2023 (GDD= 2144)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		175	11.4	2.77	21.9	8
Cabernet franc		145	10.2	2.69	27.0	5
Gamay Noir		206	13.0	2.86	21.0	10
Gruner Veltliner		176	14.2	2.99	14.0	13
Pinot Gris		190	14.8	2.98	16.5	12
Pinot Noir		184	15.0	2.98	16.0	12
Regent		215	16.0	3.10	11.9	18
Saperavi		177	11.2	2.65	34.0	5

(2) Sampling Date: 9/8/2023 (GDD= 2315)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		206	13.2	2.99	11.1	19
Cabernet franc		162	13.0	2.91	17.1	10
Gamay Noir		216	15.4	2.98	14.1	15
Gruner Veltliner		207	16.2	3.05	9.8	21
Pinot Gris		180	16.6	3.00	11.6	16
Pinot Noir		164	16.4	2.99	12.3	13
Regent		222	18.0	3.16	9.0	25
Saperavi		251	13.4	2.78	25.4	10



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(3) Sampling Date: 9/15/2023 (GDD= 2416)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		179	13.4	3.05	10.4	17
Cabernet franc		188	15.0	3.07	12.6	15
Gamay Noir		237	16.0	3.17	13.1	18
Gruner Veltliner		207	17.0	3.20	8.2	25
Pinot Gris		179	18.0	3.19	9.9	18
Pinot Noir		169	17.0	3.12	12.0	14
Regent		202	18.2	3.32	8.1	25
Saperavi		228	15.4	3.04	18.5	12

(4) Sampling Date: 9/22/2023 (GDD=2493)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		199	17.8	3.17	7.9	23
Cabernet franc		188	15.8	3.03	12.6	13
Gamay Noir		230	18.2	3.17	12.1	15
Gruner Veltliner		209	15.2	3.11	9.6	16
Pinot Gris		182	18.2	3.22	8.9	20
Pinot Noir		190	19.4	3.24	9.5	20
Regent		247	19.8	3.33	8.0	25
Saperavi		261	15.0	2.97	20.0	8



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(5) Sampling Date: 9/29/2023 (GDD= 2579)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		216	18.2	3.35	7.4	25
Cabernet franc		169	18.0	3.25	11.4	16
Gamay Noir		251	20.2	3.33	10.7	19
Gruner Veltliner		215	17.0	3.27	8.5	20
Pinot Gris		191	20.2	3.32	9.2	22
Pinot Noir		194	19.4	3.28	10.6	18
Regent	28-Sep	229	21.2	3.56	6.6	32
Saperavi		245	17.6	3.22	15.6	11

(6) Sampling Date:10/6/2023 (GDD= 2691)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois		219	19.2	3.36	6.8	28
Cabernet franc		201	19.4	3.28	9.6	20
Gamay Noir	5-Oct	222	20.4	3.36	10.2	20
Gruner Veltliner		262	18.2	3.34	7.5	24
Pinot Gris		175	20.8	3.45	7.2	29
Pinot Noir		172	21.2	3.48	8.1	26
Regent	28-Sep	229	21.2	3.56	6.6	32
Saperavi		220	21.0	3.33	11.9	18

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(7) Sampling Date:10/13/2023 (GDD= 2713)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois	11-Oct	219	19.2	3.36	6.8	28
Cabernet franc		201	19.4	3.28	9.6	20
Gamay Noir	5-Oct	222	20.4	3.36	10.2	20
Gruner Veltliner	10-Oct	262	18.2	3.34	7.5	24
Pinot Gris	11-Oct	175	20.8	3.45	7.2	29
Pinot Noir		188	21.6	3.44	8.8	25
Regent	28-Sep	229	21.2	3.56	6.6	32
Saperavi		235	20.4	3.26	13.4	15

(8) Sampling Date:10/20/2023 (GDD= 2726)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois	11-Oct	219	19.2	3.36	6.8	28
Cabernet franc		209	20.0	3.20	9.4	21
Gamay Noir	5-Oct	222	20.4	3.36	10.2	20
Gruner Veltliner	10-Oct	262	18.2	3.34	7.5	24
Pinot Gris	11-Oct	175	20.8	3.45	7.2	29
Pinot Noir		196	21.4	3.45	8.9	24
Regent	28-Sep	229	21.2	3.56	6.6	32
Saperavi	18-Oct	235	20.4	3.26	13.4	15



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(9) Final Date:10/27/2023 (GDD= 2782)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Auxerrois	11-Oct	219	19.2	3.36	6.8	28
Cabernet franc	27-Oct	209	20.0	3.20	9.4	21
Gamay Noir	5-Oct	222	20.4	3.36	10.2	20
Gruner Veltliner	10-Oct	262	18.2	3.34	7.5	24
Pinot Gris	11-Oct	175	20.8	3.45	7.2	29
Pinot Noir	24-Oct	196	21.4	3.45	8.9	24
Regent	28-Sep	229	21.2	3.56	6.6	32
Saperavi	18-Oct	235	20.4	3.26	13.4	15

Last sample date 10/20/23. Last harvest 10/27/23.



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