

2019 Grape Maturity at OSU Research Vineyards

Imed Dami, Diane Kinney, Andy Kirk, Yvonne Woodworth, 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 2019 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: 8/20/2019 (GDD=2138)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Chardonnay		136	15.2	2.93	16.9	9
Chambourcin		187	14.3	2.79	18.3	8
La Crescent		138	17.9	2.89	16.0	11
Marquette		144	18.3	2.90	16.1	11
Regent		169	17.0	3.20	13.3	13
Sauvignon blanc		139	17.5	2.94	16.8	10

*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.

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



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

go.osu.edu/grapes

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.

(2) Sampling Date: 8/27/2019 (GDD=2258)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		141	16.3	2.89	15.7	10
Chambourcin		198	16.0	2.89	15.0	11
Chardonnay		152	17.9	2.98	13.3	14
La Crescent		136	19.0	2.96	16.8	11
Marquette		132	20.3	3.01	13.7	15
Regent		190	18.9	3.27	11.1	17
Sauvignon blanc		148	19.4	3.01	12.5	16

(3) Sampling Date: 9/3/2019 (GDD=2380)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		153	18.0	3.08	11.8	15
Chambourcin		213	18.0	2.99	13.6	13
Chardonnay		143	19.8	3.07	10.2	19
La Crescent		137	20.7	3.08	15.2	14
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent		164	21.0	3.35	11.2	19
Sauvignon blanc		144	20.2	3.09	10.7	19

(4) Sampling Date: 9/10/2019 (GDD=2460)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		156	20.3	3.13	10.6	19
Chambourcin		180	20.8	3.05	12.7	16
Chardonnay		145	20.7	3.07	9.2	23
La Crescent		146	21.6	23	14.6	15
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc		151	21.6	3.11	9.8	22

(5) Sampling Date: 9/16/2019 (GDD=2604)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		159	21.2	3.25	9.3	23
Chambourcin		128	21.4	3.14	11.5	19
Chardonnay		164	21.1	3.15	8.8	24
La Crescent		140	22.6	3.11	13.6	17
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc		148	22.2	3.23	7.9	28

(6) Sampling Date: 9/23/2019 (GDD=2733)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		169	21.5	3.28	7.95	27
Chambourcin		212	22.9	3.16	10.2	22
Chardonnay	25-Sep	163	21.6	3.05	8.2	26
La Crescent	24-Sep	146	23.9	3.10	13.1	18
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc	17-Sep	163	21.7	3.16	9.4	23

(7) Sampling Date: 9/30/2019 (GDD=2840)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	1-Oct	163	22.8	3.42	7.40	27
Chambourcin		206	23.0	3.32	9.7	24
Chardonnay	25-Sep	163	21.6	3.05	8.2	26
La Crescent	24-Sep	146	23.9	3.10	13.1	18
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc	17-Sep	163	21.7	3.16	9.4	23

(8) Sampling Date: 10/7/2019 (GDD=2960)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	1-Oct	163	22.8	3.42	7.40	27
Chambourcin		213	22.9	3.33	9.2	25
Chardonnay	25-Sep	163	21.6	3.05	8.2	26
La Crescent	24-Sep	146	23.9	3.10	13.1	18
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc	17-Sep	163	21.7	3.16	9.4	23

(9) Sampling Date: 10/9/2019 (GDD= 2968)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	1-Oct	163	22.8	3.42	7.40	31
Chambourcin	9-Oct	211	22.9	3.33	8.6	27
Chardonnay	25-Sep	163	21.6	3.05	8.2	26
La Crescent	24-Sep	146	23.9	3.10	13.1	18
Marquette	4-Sep	146	21.4	3.10	13.4	16
Regent	9-Sep	169	21.6	3.36	10.3	21
Sauvignon blanc	17-Sep	163	21.7	3.16	9.4	23

Grape maturity of grape varieties at the Kingsville research vineyard:

(1) Sampling Date: 8/23/2018 (GDD=2009)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Frontenac	163	15.6	2.86	26.4	6
Regent	196	13.0	2.91	16.1	8
Siegenerbe	296	15.6	3.45	8.6	18

(2) Sampling Date: 9/3/2019 (GDD=2189)

Variety	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	SS/TA*10
Frontenac	140	18.4	3.04	22.3	8
Regent	184	16.2	3.02	12.1	13
Siegenerbe	315	17.4	3.60	5.9	30

(3) Sampling Date: 9/9/2019 (GDD=2285)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Chardonnay		184	17.0	3.17	15.3	11
Frontenac		141	18.6	3.12	20.7	9
Gamay noir		259	15.6	3.16	14.2	11
Gruener Veltliner		226	15.4	3.15	11.9	13
Pinot noir		189	16.8	3.12	11.4	15
Regent		199	17.4	3.17	10.3	17
Sauvignon blanc		203	16.6	3.13	17.3	10
Sauvignon gris		203	16.6	3.13	17.3	10
Siegenerbe	9-Sep	299	17.2	3.41	5.6	31

(4) Sampling Date: 9/16/2019 (GDD=2401)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Chardonnay		173	18.0	3.05	11.9	15
Concord		278	14.4	2.97	11.8	12
Frontenac		128	20.6	3.03	16.8	12
Gamay noir		254	15.6	3.08	11.8	13
Gruener Veltliner		196	17.6	3.24	7.8	22
Pinot gris		155	17.4	3.15	8.4	21
Pinot noir		180	16.8	3.18	11.9	14
Regent		199	18.4	3.2	8.7	21
Sauvignon blanc		199	17.4	3.06	15.2	11
Sauvignon gris		189	17.4	3.1	13.7	13
Siegeerrebe	9-Sep	299	17.2	3.41	5.6	31

(5) Sampling Date: 9/23/2019 (GDD=2532)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		136.8	16.8	3.22	12.06	14
Chardonnay		185.6	19.6	3.25	11.66	17
Concord		300.4	15.8	3.14	9.38	17
Frontenac		117	21.6	3.2	16.5	13
Gamay noir		235	17.6	3.19	4.8	37
Gruener Veltliner		247	18.0	3.34	9.7	19
Pinot gris		155	19.4	3.1	8.2	24
Pinot noir		187	17.8	3.23	10.9	16
Regent		205	19.0	3.2	8.1	23
Sauvignon blanc		203	19.4	3.04	11.7	17
Sauvignon gris		197	19.6	3.06	11.2	18
Siegeerrebe	9-Sep	299	17.2	3.41	5.6	31

(6) Sampling Date: 9/30/2019 (GDD=2646)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		140	19.0	3.16	14.9	13
Chardonnay		188	20.6	3.25	11.2	18
Concord		332	17.2	3.04	7.3	23
Frontenac		122	23.4	3.15	16.8	14
Gamay noir		238	19.2	3.24	10.9	18
Gruener Veltliner		214	18.8	3.24	5.5	34
Pinot gris		180	20.6	3.33	6.8	30
Pinot noir		193	17.4	3.30	10.7	16
Regent		206	20.0	3.40	7.2	28
Sauvignon blanc		186	20.4	3.12	12.2	17
Sauvignon gris		207	20.0	3.00	10.6	19
Siegerrebe	9-Sep	299	17.2	3.41	5.6	31

(7) Sampling Date:10/7/2019 (GDD=2742)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		134	19.8	3.12	11.3	18
Chardonnay		211	21.0	3.20	10.2	21
Concord		317	18.0	3.04	7.2	25
Frontenac		118	23.6	3.09	15.2	16
Gamay noir		259	19.6	3.15	10.5	19
Gruener Veltliner		205	19.2	3.33	7.8	25
Pinot gris	2-Oct	180	20.6	3.33	6.8	30
Pinot noir		187	18.0	3.19	9.4	19
Regent		187	20.6	3.49	6.9	30
Sauvignon blanc		178	21.0	3.09	11.0	19
Sauvignon gris		175	21.2	3.16	8.8	24
Siegerrebe	9-Sep	299	17.2	3.41	5.6	31

(8) Sampling Date:10/14/2019 (GDD=2782)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc		136	20.6	3.21	10.6	19
Chardonnay		185	21.8	3.30	9.2	24
Concord		340	18.8	3.19	7.0	27
Frontenac		120	24.0	3.18	13.5	18
Gamay noir		240	21.2	3.3	8.6	25
Gruner Veltliner	7-Oct	205	19.2	3.33	7.8	25
Pinot gris	2-Oct	180	20.6	3.33	6.8	30
Pinot noir		181	19.0	3.37	8.7	22
Regent	8-Oct	187	20.6	3.49	6.9	30
Sauvignon blanc		172	22.0	3.19	10.1	22
Sauvignon gris	9-Oct	175	21.2	3.16	8.8	24
Siegenerrebe	9-Sep	299	17.2	3.41	5.6	31

(9) Sampling Date:10/22/2019 (GDD=3006)

Variety	Harvest Date	100 Berry wt (g)	SS (%)	pH	T.A. (g/L)	FMI
Cabernet franc	23-Oct	130	21.6	3.09	9.4	23
Chardonnay	15-Oct	182	21.5	3.30	9.6	22
Concord	14-Oct	340	18.8	3.19	7.0	27
Frontenac	17-Oct	120	24.0	3.18	13.5	18
Gamay noir	14-Oct	228	20.5	3.28	9.4	22
Gruner Veltliner	7-Oct	205	19.2	3.33	7.8	25
Pinot gris	2-Oct	180	20.6	3.33	6.8	30
Pinot noir	18-Oct	181	19.0	3.37	8.7	22
Regent	8-Oct	187	20.6	3.49	6.9	30
Sauvignon blanc	10-Oct	177	21.7	3.21	10.2	22
Sauvignon gris	9-Oct	175	21.2	3.16	8.8	24
Siegenerrebe	9-Sep	299	17.2	3.41	5.6	31