

Juice Analysis of Varietal Ciders in Western Washington

Apples are categorized for cider making based on their tannin and acid contents (Table 1). At harvest, 15-25 ripe fruit were collected for each cultivar. From 2002 to 2012, fruit were milled and pressed in a basket cider press. After 2013 fruit samples were chopped in a shredder and pressed in a bladder press. Juice samples were collected in 500 mL plastic bottles and analyzed for soluble solids concentration ($^{\circ}$ Brix), pH, specific gravity (not shown), malic acid ($\text{g}\cdot\text{L}^{-1}$), and tannins (%).

Table 1. Juice analysis of cider varieties grown at WSU Mount Vernon NWREC 2002-2015.

Cultivar	Years Evaluated	Tannin %		Malic Acid g/l		$^{\circ}$ Brix		pH	
		Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
American Forestier	3	0.16	0.06	2.15	0.29	11.8	0.25	3.88	0.23
Blanc Mollet	3	0.23	0.06	1.59	0.16	11.5	0.10	4.28	0.10
Bouteville	5	0.14	0.03	1.46	0.34	12.6	0.72	4.56	0.09
Bramley's Seedling	5	0.10	0.04	10.39	0.61	11.0	1.21	3.20	0.32
Bramtot	5	0.60	0.26	3.30	0.55	13.4	1.38	4.01	0.09
Breakwell Seedling	7	0.23	0.19	7.25	2.90	10.7	0.93	3.29	0.19
Brown Snout	9	0.18	0.06	3.28	0.75	13.1	1.70	3.57	0.96
Brown Thorn	3	0.17	0.04	1.86	0.92	11.7	1.64	4.36	0.23
Brown's Apple	5	0.14	0.09	7.42	0.53	10.5	1.23	3.26	0.17
Bulmer's Norman	7	0.21	0.07	2.15	0.30	11.4	0.53	4.08	0.11
Campfield	6	0.18	0.11	2.48	0.24	13.0	1.17	4.37	0.16
Chisel Jersey	5	0.46	0.31	2.39	0.61	13.8	1.15	4.41	0.33
Cimitiere	3	0.28	0.06	1.36	0.21	10.2	1.50	4.51	0.34
Court Pendu Rose	4	0.11	0.03	8.22	1.87	11.9	1.45	3.38	0.27
Dabinett	10	0.27	0.17	2.35	1.23	13.8	1.14	4.40	0.23
Doux Normandie	4	0.26	0.16	3.22	0.66	11.3	1.16	3.80	0.18
Finkenwerder Herbstprinz	7	0.23	0.37	9.39	1.78	13.6	0.64	3.23	0.16
Frequin Rouge	6	0.33	0.15	2.66	0.34	11.3	0.96	4.16	0.22
Golden Russet	7	0.11	0.05	6.67	0.81	16.1	1.74	3.63	0.22
Gravenstein, Red Worthen	4	0.07	0.03	4.74	1.13	12.9	0.34	3.62	0.44
Grimes Golden	5	0.08	0.03	6.77	0.40	12.3	0.89	3.46	0.09
Grindstone	5	0.12	0.04	5.86	0.96	13.7	1.33	3.46	0.16
Harrison	5	0.13	0.05	7.05	2.11	15.3	0.75	3.44	0.29
Harry Masters' Jersey	6	0.23	0.06	1.98	0.48	12.6	1.52	4.31	0.22
Jouveaux	5	0.18	0.08	3.12	0.54	13.2	2.16	4.01	0.10
Kermerrien	8	0.35	0.09	2.59	0.35	12.7	1.36	3.79	0.23
Kingston Black	9	0.16	0.10	6.23	1.01	13.3	1.26	3.49	0.20
Major	5	0.25	0.06	2.08	0.45	13.5	0.98	4.21	0.13
Maude	4	0.08	0.03	4.30	0.59	11.5	1.94	3.46	0.08

Michelin	5	0.16	0.06	3.15	0.35	11.9	0.79	4.03	0.18
Mott Pink	3	0.06	0.04	6.52	1.86	10.7	1.54	3.23	0.07
Muscadet de Dieppe	9	0.21	0.07	2.73	0.69	14.6	1.17	4.12	0.20
Peau de Vache	5	0.13	0.05	2.40	0.41	11.4	0.65	4.02	0.18
Redstreak	5	0.10	0.03	9.73	1.68	11.7	0.46	3.18	0.18
Ross Nonpareil	3	0.22	0.24	5.95	2.17	14.5	1.82	3.64	0.16
Roxbury Russet	5	0.07	0.02	5.60	1.18	15.7	1.03	3.55	0.23
Royal Jersey	3	0.34	0.27	1.88	0.38	11.7	1.14	4.09	0.06
Smith's Cider	4	0.08	0.03	5.66	1.66	11.3	1.18	3.36	0.21
Stoke Red	5	0.29	0.08	6.10	1.01	12.1	1.07	3.58	0.26
Sweet Alford	5	0.08	0.04	1.87	0.64	11.8	1.85	4.46	0.22
Sweet Coppin	2	0.11	0.03	2.30	0.13	11.7	0.50	3.98	0.09
Taliaferro (Colaw)	4	0.10	0.06	7.75	1.16	11.1	0.67	3.12	0.17
Track Zero (Ross Sdlg.)	5	0.11	0.04	1.85	0.34	12.8	0.99	4.09	0.08
Tramlett's, Geneva ¹	6	0.18	0.05	10.47	0.88	11.3	0.72	3.20	0.21
Vilberie	8	0.48	0.21	2.87	0.72	11.8	1.45	3.89	0.15
Whidbey	5	0.11	0.04	6.99	1.76	12.3	1.40	3.56	0.27
Yarlington Mill	8	0.20	0.10	2.37	1.00	11.8	1.69	4.14	0.36
Zabergau Reinette	6	0.14	0.04	8.09	2.40	14.2	2.25	3.53	0.19

¹Received from Geneva, NY as "Tramlett's Bitter," incorrectly named.

12/2016