

New York State Wine Analytical Laboratory and Wine Data Bank

January, 2019 NYGWF report for project term 1 April 2019 to 31 March 2020

Key Personnel

Pam Raes¹ and Chris Gerling²

¹Technician, and ²Enology Extension Associate, Dept. Food Science, Cornell AgriTech, Geneva, NY, 14456

Laboratory Activities:

2019 was another year of growth for the lab. Two years after brushing the 1,000 sample mark, the lab received more than 2,000 samples in 2019. The official name of the lab is changing to reflect the evolving New York marketplace, and we will henceforth be known as the Cornell Craft Beverage Analytical Lab (CCBAL). The primary driver for this change is the addition of Kaylyn Kirkpatrick's hops analysis program, but we continue to see growth across all sectors. More than half of all submitted samples were grape juice, wine or fruit wine, and two of the three most frequently requested tests are used exclusively or primarily for wine or grape juice.

The WAL generally serves two primary groups of consumers: new industry members seeking knowledge and/ or troubleshooting help, and established wineries performing QC or facing unusual problems. The need for routine analysis or backup validation for startup operations is a chief concern, and we continue to interact with new industry members in this capacity. Demand for analytical training remains high, and is reflected in our continued development of new workshops and training programs.

In addition to new producers, the bulk of the year's analyses focused on quality checks for established wineries. Interpretive services and advanced lab analysis are still in high demand, and the WAL is in a unique position to meet this industry need. The lab's regional and technical knowledge base, and ability to perform lab analyses requiring instrumentation and training beyond the scope of the average winery, remains essential to the identification and rectification of a wide range of wine flaws. We also are seeing more demand for export analysis from wineries across the state.

Before 2015, sterile bottling and checks for sterility were the most frequently sought tests. More recently, clients are seeking analysis for regulatory purposes, including export certification, label verification or to qualify under a certain TTB standard of identity. We are also seeing more usage of our infrared wine (and juice) scans, as wineries look for quick checks of the main wine chemical parameters.

**Table 1: NYSWAL
Analysis Load, 1998-201**

Year	Samples	Clients
1998	247	47
1999	450	54
2000	321	51
2001	533	51
2002	542	54
2003	439	65
2004	524	65
2005	382	68
2006	572	95
2008*	446	104
2009	346	68
2010	460	80
2011	822	87
2012	844	85
2013	685	91
2014	618	98
2015	641	101
2016	841	123
2017	998	169
2018	1762	248
2019	2196	259
Mean	699	98
<i>*Data for 2007 is unavailable.</i>		

Table 2: Percentage of submitted samples receiving analysis		
2019 %	2018 %	Topic
40	27	Wine Scan (IR)
26	34	Alcohol Measurement
12	15	Sterility, yeast counts, sterile bottling
12	10	SO2
10	14	Other (Export, YAN, residual sugar, CO2, sensory)

In 2017, the lab worked with our accounting service center to complete an internal review of our pricing structure. We tried to involve both our contacts in the ASC as well as NY Wine & Grape in our planning so everyone would understand and be ready for any changes. In 2018, we overhauled our database to make it more usable and efficient. As demand for lab services rise, so does the associated record-keeping, invoicing and general administration. Our goal has been to better automate our sample intake and billing output to minimize errors and increase our ability to collect and analyze data. The new database went into action in July of 2018, and a new invoicing method was introduced in January of 2019. The database is now hosted on a server and accessible by any member of the lab. Invoicing no longer requires numerous manual transcriptions, decreasing both labor and errors.