

Department of Food Science and Technology

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Virginia Wine Board Report 3/23/09

Laboratory Technical Assistant

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The objectives of this funding are to follow the goals established by the original Virginia Winegrowers Advisory Board: To increase wine quality by providing extension and research assistance. The activities of the Laboratory Technical Assistant included the following:

- Assistance in conducting short courses, seminars, and workshops for the Virginia industry.
- Help to maintain the Enology-Grape Chemistry Group's website (www.vtwines.info).
- Preparation of wines and reagents, and data analysis for extension programs.
- Statistical analysis of extension and research data.
- Assistance in experimental wine production.
- Analysis of applied research grapes, juices, and wines.

This position aids in the dissemination of information on issues of wine quality and wine quality control. The Laboratory Technical Assistant has been involved in research efforts designed to help resolve practical and limiting problems facing the Virginia wine industry. The practical significance of each research effort has been conveyed to the industry in the form of my electronic technical brief (*Enology Notes*), short courses, and industry meetings.

The current research involving the aid of the Laboratory Technical Assistant is listed below:

- Wine grape cultivars, clone and training system evaluation of Cabernet franc, Traminette, and Viognier.

- Wine grape cultivar evaluation in Virginia's Southern Piedmont.
- Use of an electronic nose for the evaluation of wine grape maturity.
- Evaluation of Petit Manseng fruit volatiles.
- Aid in the evaluation of the nitrogen status of grape juice as an indicator of wine quality.

Attempts to improve Virginia wine quality control have taken two basic forms: 1) laboratory and non-laboratory extension, including short course programs, winemaker roundtable meetings, extension publications, technical briefs (*Enology Notes*), expansion of our website, laboratory extension activities, and direct contact. Additionally, supplemental quality control (QC) analysis are performed by the Enology Service Lab of the Enology-Grape Chemistry Group. The Laboratory Technical Assistant has been involved in reviews of some of the data generated by the lab, including analysis of YAN components and comparing 2007 with the 2008 harvest seasons.

Short courses and activities involving the Laboratory Technical Assistant, for the reporting period include the following programs:

- Annual Juice and Wine Analysis Workshop.
- Winery Planning and Design workshop (being planned for Spring 2009).
- Technical Winemakers Roundtables
- Annual Pre-harvest Workshop (planned for late Spring 2009)

The Laboratory Technical Assistant has been involved in efforts designed to help resolve practical and limiting problems facing the Virginia wine industry. The practical significance of these efforts has been to aid in lowering the cost of production, increasing quality, or both.

