

Wine Board Report 3/24/09

Wine Grape Cultivar Evaluation in Virginia's Southern Piedmont

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The objectives of this funding are to evaluate a series of wine grape cultivars in the Eastern Piedmont region of Virginia. The information gained from this research provides growers with objective inputs about yields, fruit quality, bunch rot susceptibility, and wine quality. Timely transfer of knowledge to growers and winemakers has been achieved, and will continue, through:

- Newsletters: *Enology Notes* and *Viticulture Notes*
- Seminars and short courses (examples include American Society for Enology and Viticulture, eastern section meetings, Virginia Growers Workshops, and VVA technical meetings)
- Winery Roundtable meetings
- Website postings

For the 2008 season berries were randomly collected from each cultivar replicate, beginning at approximately 18°Brix, until and including harvest. Harvest decisions were predicated upon disease incidence, fruit aroma and taste, and imminent climatic or wildlife threats. Yield components included clusters per vine, cluster weight, berries per cluster, berry weight, and fruit weight per vine.

Fruit chemistry analyses included soluble solids, pH, titratable acidity, tartaric and malic acid concentration.

Small lots of wine were made using standard micro-vinification procedures, at Virginia Tech's research winery in the Department of Food Science and Technology, Blacksburg, Virginia.

Replicated wines lots were produced and analyzed for alcohol % (v/v), extract, and phenol polymerization, total phenols, phenol-free glycosides, and anthocyanin-free glycosides, and copigmented colors.

Sensory analysis will be conducted on each pooled wine lot at nine months post-fermentation using hedonic preference testing. Wines will also be evaluated by the industry at Winemaker Roundtable meetings. The 2007 and 2008 seasons will be compared for each cultivar.

