

RESEARCH PROGRESS REPORT

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Wine Grape Cultivar Evaluations

The objectives of this study are to evaluate a series of novel wine grape cultivars in the Eastern Piedmont of Virginia.

The outcome and benefits of the cultivar evaluation are expected to include wine grape cultivars that can be recommended for the Eastern Piedmont. Currently, we have very few cultivars that can be endorsed for this region of the state, yet requests for such information are originating from this region. Cultivars planted include NY73.0136.17, Vidal, Traminette, Norton, Tannat #1, Mourvedre, Viognier #1, Rousanne #1, Cabernet Sauvignon #7, Cabernet Sauvignon #337, Chardonnay #96, Tempranillo, Petit Manseng, Touriga Nacional, Tinta Cão, Aleatico, and Muscat blanc. Norton is ungrafted. All others are grafted either to C-3309, 5C, or 101-14 rootstocks.

Fruit chemistry: Berry weight, soluble solids, fermentable N, and pH were determined on fresh (non-frozen) berry samples. Titratable acidity was determined either on fresh juice, or on frozen juice samples. For reds, copigmented colors were determined. Tartaric and malic acid concentration assays were conducted by reverse-phase HPLC. Alcohol % (v/v), extract, phenol polymerization, phenol-free, and anthocyanin-free glycosides were completed as outlined by Zoecklein et al. (1999) or Zoecklein et al. (2000).

Small-lot wine-making: Small lots of wine were produced, with replicates from each cultivar, using standard micro-vinification procedures.

Sensory evaluation: Sensory analysis is being conducted this spring on each wine lot at five months post-fermentation, using duo-trio paired comparison analysis, as described in the original proposal.

Timely transfer of knowledge to growers and vintners is attempted through:

- Newsletters (*Enology Notes* electronic newsjournal)
- Seminars and short courses
- Winery Roundtable meetings
- Website postings on the Enology-Grape Chemistry website.