

## **Analysis of Wine Components in Cynthiana and Syrah Wines**

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Red wine is composed of a complex matrix of compounds that can interfere with analysis. A high-performance liquid chromatography (HPLC) procedure was developed to efficiently analyze organic acids, sugars, glycerol, and ethanol in Cynthiana (*Vitis aestivalis*) wine. Standard laboratory procedures (pH, titratable acidity, and color attributes) and HPLC were found reproducible for Cynthiana wine. HPLC recovery efficiency was determined by analysis of spiked and unspiked samples (model, Cynthiana, and Syrah (*Vitis vinifera*) wines). Although recovery of components was greater in the model wine, recovery in Cynthiana and Syrah wine was comparable. The HPLC procedure was further compared to commercial rapid enzyme analysis tests using model, Cynthiana, and Syrah wines. HPLC analyses were more accurate than enzymatic tests for determining components in the model, Cynthiana, and Syrah wines. Considering the complexity of the wines analyzed, reproducibility and recovery of the HPLC procedure was demonstrated and showed improvement and precision when compared to existing methods.

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