

## **pH Modification of Cynthiana Wine Using Cationic Exchange**

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Membrane and resin ion-exchange technology was used for pH reduction and production of Cynthiana (*Vitis aestivalis*) wine, which can have high pH and high titratable acidity. Wine attributes were monitored during storage for 6 months at 21 and 38 °C. Nonadjusted Cynthiana wine (pH 4.1) was compared to ion-exchange-adjusted wine (pH 3.5). Ion exchange lowered the pH and potassium content and increased the titratable acidity of wine without having detrimental effects on color and phenolics. No trends were found to indicate differences between manufacturers of membranes and resins on pH-adjusted Cynthiana wine. Wine treated with membrane ion exchange was higher in color density and phenolics than resin-treated wine. During storage at both temperatures, the quality of the wine decreased, with greater degradation at 38 °C. Ion exchange decreased the pH of Cynthiana wine without negatively affecting wine quality attributes. A panel familiar with characteristics of Cynthiana wine found that the color and flavor of the pH-adjusted wine was improved.

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