

## Wine TA Results Interpretation

Titrateable acidity in grapes is based primarily on two compounds, tartaric acid and malic acid. Both of these acids increase during berry development until veraison, then start to decline. While levels vary by variety and growing conditions, tartaric acid declines slowly as optimum harvest is approached, but malic acid declines rapidly, especially in warmer growing regions. Monitoring TA as grapes approach optimum ripeness helps ensure optimum varietal character at harvest.<sup>1-2</sup> Wines produced from grapes where the overall acid levels have become too low are often bland, flat tasting and devoid of fruit character. A ratio of sugar to titrateable acidity has been recommended as one method of judging optimum ripeness.<sup>2-3</sup>

Knowledge and control of Titrateable Acidity (TA) are important in the production of premium wine. Adjustment of TA is important to optimize extraction of flavor components prior to fermentation. During processing, controlling TA improves fermentation. Post fermentation, management of acidity levels leads to correct balance, and improves the efficacy of aging.<sup>4</sup> Post fermentation monitoring of TA levels can also be used to follow undesirable changes caused by yeasts or bacteria.<sup>5</sup>

In quality wine, the optimum TA value for red table wines is considered 6 – 8 g/L as tartaric acid (3.9 – 5.2 g/L as H<sub>2</sub>SO<sub>4</sub>), and for white table wines, 7 –9 g/L as tartaric acid (3.9 – 5.2 g/L as H<sub>2</sub>SO<sub>4</sub>). Dessert wines usually have a slightly lower TA range.<sup>5</sup>

### Results Interpretation for Most Wines

(Because of varietal & stylistic differences, growers & winemakers should make final interpretations.)

<u>TA</u> (g/L Tart.)	<u>TA</u> (g/L H <sub>2</sub> SO <sub>4</sub> )	<u>Harvest</u>	<u>Must and Wine</u>
≤4.0	≤2.6	Monitor earlier next year!	Consider acid addition
5.0	3.3	Monitor earlier next year!	Consider acid addition
6.0	3.9	O.K. to pick for dessert wine	Low end of acceptable range for red wine, consider acid addition for white wine
6.5	4.2	O.K. to pick for dessert wine, pick for red still wine	Acidity O.K. for red wine, consider acid addition for white wine.
7.0	4.6	O.K. to pick for dessert and red wines, pick for white wine	Acidity O.K. for whites and reds
7.5	4.9	O.K. to pick for all wines	Acidity O.K. for whites and reds
8.0	5.2	O.K. to pick for all wines	Acidity O.K. for whites and reds
8.5	5.5	O.K. to pick for all wines	Acidity O.K. for whites, consider acidity reduction for reds
9.0	5.9	O.K. to pick for sparkling whites	Upper end of acidity for whites, consider acidity reduction for reds
10.0	6.5	O.K. to pick for sparkling whites	Consider acidity reduction for still white and red wines; acidity O.K. for sparkling wine
≥11.0	≥7.2	O.K. to pick for sparkling whites	Consider acidity reduction for still white and red wines; acidity O.K. for sparkling wine

### References

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