

Title: Descriptive analysis and consumer studies of Viognier wines from Virginia, California and France

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Type of Project: Research

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Objectives:

1. Does Virginia Viognier possess unique sensory attributes distinctive from other well known Viognier producing regions?
2. What sensory or chemical attributes distinguish Virginia Viognier from other Viogniers?
3. Do consumers in Virginia and California have different palates in terms of Viognier?
4. Is Virginia Viognier addressing the consumer's likes and dislikes?

Summary:

This study combines descriptive analysis with bi-coastal United States consumer studies to determine if the Viognier from the three regions are discernibly different and if there exists a regional preference for Viognier wines.

A trained panel (n=12) identified the key characteristics of Viognier wines from Virginia, France, and California. Fourteen aroma attributes were identified and assessed: *Artificial fruit, chemical, citrus, earthy/dusty/musty, floral, green apple, hay, honey, hot (ethanol), melon/cucumber, stone fruit, sulfidic, tropical fruit, woody, yeasty, and overall product intensity*. Six taste and mouth feel attributes were measured: *astringent, bitter, hot (ethanol), sour, sweet, and viscosity*. Principal component analysis and analysis of variance were used to describe and differentiate among wines and countries. *Overall product intensity, artificial fruit, honey, hot, stone fruit, sulfidic, tropical fruit, viscosity, sweet, sour, astringent and hot mouthfeel* were all found to be significant across wines. When analyzing product versus region, wines from California were found to be significantly greater in *overall intensity, stone fruit, artificial fruit and tropical fruit* than wines from Virginia and France. French Viogniers were found to be significantly greater in *woody* than Virginian or Californian Viogniers. Consumer studies in Virginia (n=193) and California (n=109) found a preference for wines high in fruit intensities and higher residual sugar and acidity.

Virginia Viognier is separated from the French and Californian wines by possessing a lighter, less intense aroma profile than California with less oak aroma. For those who prefer French wines, Virginia can provide a wine that is elegant and lighter in composition

without the wood component. Virginia wines also provide an alternative to more intensely fruity wines with higher alcohols.

By nature, many consumers gravitate towards wines that possess greater fruity character and slight sweetness and less towards wines that possess bitter components to them, possibly because many bitter plants are poisonous. However, it is not the opinion of this author that all wines in Virginia should be made with residual sugar in order to target this consumer group. It seems that most of the consumers who purchase wines in the price bracket from which Virginia offers its Viognier wines, prefer Virginian wines and select them over other wine regions.