



Use of Oenolees (Laffort) in Sparkling Rosé

Rappahannock Cellars

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Summary

The product information for Oenolees (Laffort) states that this product can be used to improve “finesse and foam persistence on sparkling wines” and can be used to speed the positive effects of aging on lees. In this experiment, a single lot of Rosé base wine was bottled for secondary fermentation and tirage with and without addition of 80 ppm Oenolees. There were no differences in wine chemistry, foam height, or foam retention with addition of Oenolees. Group sensory analysis found that the control wine had a higher perception of bubble concentration than the Oenolees treated wine. However, group sensory analysis of sparkling wine has many potential variables.

Introduction

As with many Virginia wineries, the sparkling wine program at Rappahannock is expanding, which includes a need to release sparkling wine with shorter aging time on lees. Laffort Oenolees is a yeast cell wall preparation with high concentration of HSP12 peptide. This product is sold as improving “finesse and foam persistence on sparkling wines.” According to Sean Richardson, the representative for Laffort, the addition of Oenolees during tirage will result in 18-24 months of aging within 9-12 months. In this experiment, a single lot of Rosé base wine was bottled for secondary fermentation and tirage with and without addition of 80 ppm Oenolees.

Methods

Wine was made according to the standard protocols of the winery for sparkling Rosé wine base. After the base wine was blended and prepared for sparkling (including fining with 30 g/hL bentonite and 15 g/hL PVPP, acid adjustment and cold stabilization), the fined and stabilized lot was split to two tanks. The control lot received sugar (22 g/L), DAP (10 g/hL), and Clarifiant (80 ml/hL). The treatment tank received these additions as well as 80 ppm Oenolees. Wines were bottled on the same day (December 18, 2018) with the same yeast starter culture and aged on lees until disgorging on 11/12/19 for a total of 11 months aging sur lie.

Sensory analysis was completed by a panel of 32 wine producers. To maintain consistent temperature between samples, wines were served at room temperature. At the beginning of the sensory flight, bottles were opened and each participant poured his/her own wine into a glass. Wines were scored immediately to avoid loss of bubbles. After the first wine had been scored, the procedure was repeated with the second wine. Each wine was labeled with a random number and pouring order was balanced between tasters. Wines were scored on a

a scale of 0 to 10 for bubble concentration, bubble size, toasty/yeasty character, and fruit intensity. Tasters were also asked to identify which wine had more “aged character”. They were also given open ended questions to describe the wines. Descriptive scores were analyzed using repeated measures ANOVA.

Results

The general chemistry of these wines was not affected by Oenolees addition. Oenolees addition did not affect foam height or retention, and decreased stability time of bubbles. In blind sensory analysis, the perceived concentration of bubbles was less for the Oenolees treated wine than the control ($F=5.356$, $p=0.024$). The wines did not differ for any of the other descriptors tested (Table 3). When asked which had the most aged character, 28 panelists responded, with 14 choosing the control and 14 choosing the Oenolees. Sensory analysis of room temperature sparkling wine may have led different bubble dynamics than would be apparent in chilled wine, however in a large group tasting, temperature differences would introduce uncontrolled variables.

Table 1: General wine chemistry (ICV Labs)

	fSO ₂ (ppm)	tSO ₂ (ppm)	pH	TA (g/L)	RS (g/L)	Ethanol (%)	VA (g/L)
Control	<1	45	3.42	5.48	0.27	11.74	0.11
Oenolees	1	50	3.40	5.36	0.19	11.53	0.11

Table 2: Foaming capacity test (Enartis Vinquiry)

	Foam Height (mm)	Foam Retention (mm)	Stability Time (sec)
Control	62	35	129
Oenolees	62	35	102

Table 3: Sensory descriptors for two treatments of sparkling Rosé

	Control		Treatment		ANOVA	
	Mean	SD	Mean	SD	F	P
Bubble size	5.6	2.6	5.3	2.0	0.28	0.60
Bubble concentration	5.6	2.4	4.6	2.4	5.36	0.02
Fruit intensity	4.6	1.9	4.9	1.8	0.35	0.56
Toasty/yeasty character	4.7	2.1	4.7	1.9	0.02	0.90