67 SIXTY-SEVENTH NATIONAL CONFERENCE

# SCIENCE

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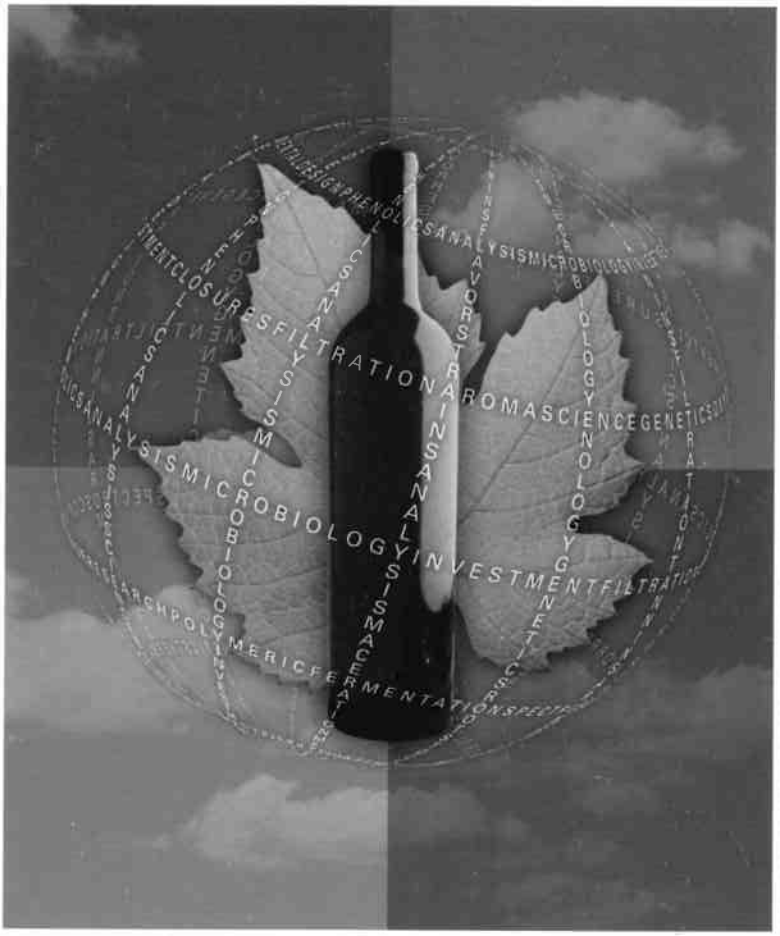


## PROGRAM AND TECHNICAL ABSTRACTS

AMERICAN SOCIETY FOR ENOLOGY AND VITICULTURE

**67th ASEV National Conference**

**June 27–30, 2016**

PROGRAM INCLUDES

Merit Award Presentation – **Dr. Douglas O. Adams University of California, Davis**

ASEV Extension Distinction Award Presentation – **Dr. Bruce Zoecklein Virginia Tech, Blacksburg**

Monterey County Winery & Vineyard Tour

Managing Water in California Vineyards Symposium (7.0 CCA CEUs)

Research Reports

Student Flash Talks

Monterey County Regional Wine Reception

Industry Seminars with Supplier Displays

Outreach Seminar – Mechanization and Precision Management of Winegrape Vineyards

**Portola Hotel & Monterey Marriott**

Monterey, California USA

(ethanol, volatile acidity, titratable acidity, pH, and free and total $SO_2$) and phenolic profiling of the wines was performed by ETS Laboratories to determine the impact of including RB(+) fruit on wine composition. Phenolic profiling showed significant differences between RB(+) and RB (-) wines in the concentration of many phenolic compounds, including monomeric flavan-3-ols, anthocyanins, and polymeric pigments, but no significant difference in tannin concentration. Wines will also be analyzed by phloroglucinolysis to investigate potential differences in tannin composition and by HS-SPME-GC-MS to determine the aroma profiles. Formal descriptive analysis of the wines will commence shortly. Preliminary evaluation of the wines indicated clear differences among wine treatments in both flavor and mouthfeel.

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## Foliar Spray Application of Inactive Dry Yeast at Veraison: Effect on Berry Skin Thickness, Aroma, and Phenolic Quality

**Simone Giacosa**, Susana Río Segade, Maria Alessandra Paissoni, Carolina Ossola, Vincenzo Gerbi, Javier Téllez Quemada, Fabrizio Torchio, Milena Lambri, Alberto Caudana, Enzo Cagnasso, and Luca Rolle*
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Achieving a satisfactory aroma and phenolic maturity at harvest is key to producing quality wines. A foliar spraying treatment with yeast derivatives was tested on the grape (*Vitis vinifera* L.) varieties Chardonnay, Cortese, Barbera, and Nebbiolo. The treatment was carried out at veraison with two different formulations for white and black varieties (LalVigne Aroma and LalVigne Mature, respectively) to enhance aroma and phenolic quality. The influence of the treatments on berry skin thickness was also evaluated. The analyses were carried out on grapes at harvest and experimental wines were produced and analyzed. The berry distribution of Chardonnay and Cortese grapes in density classes, obtained by flotation in saline solutions, evidenced smoother ripening of treated berried and resulted in an average increase in must acidity without affecting sugars accumulation (Brix). Furthermore, berry skin thickness also increased in treated berries. This textural result was also found in Nebbiolo, while Barbera did not show a clear difference. Skin phenolic quality, evaluated by maceration in wine-like solutions, of Barbera was not significantly affected, probably because this variety is characterized by low skin flavanol concentrations. Instead, Nebbiolo evidenced a positive influence of the treatment in extracted and total anthocyanins and flavanols. Overall, the treatments influenced the grapes quality, providing a tool to winemakers for differentiation of the products.

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**Bold type indicates presenting author**