



Winetech Scan

Wine Industry Network of Expertise and Technology • Netwerk van Kundigheid en Tegnologie vir die Wynbedryf



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On-vine grape drying combined with irrigation allows to produce red wines with enhanced phenolic and rotundone concentrations



A viticultural system combining irrigation and PES with the aim of increasing rotundone while mitigating the negative effects of irrigation, allowed for the production of grapes with higher sugar concentration and red wines with higher rotundone, anthocyanins and total polyphenolic index (TPI). The results obtained may be applicable to grapegrowers producing Shiraz, Gamay or other cultivars in which rotundone has been identified.

[Read more](#)



Vineyard irrigation scheduling based on airborne thermal imagery and water potential thresholds

This study presented a promising and powerful method for scheduling irrigation throughout the season at vineyard level based on estimates of remotely sensed leaf water potential. [Read more](#)

Glyphosate impacts on polyphenolic composition in grapevine berries and wine

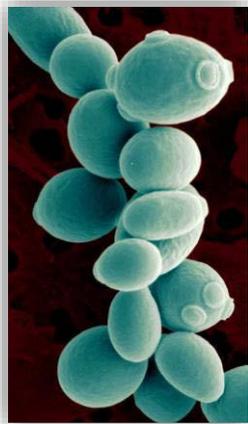


The findings of this study indicate that, at harvest, both pH and anthocyanin concentration were significantly lower and titratable acidity higher in berries collected from vines of plots under glyphosate-treatment compared with those of non-treated parcels. Data suggest that treatment with glyphosate did not change the concentration of anthocyanins, other flavonoids and phenolic acids in the wine. The results indicate that treatment with glyphosate may affect fruit metabolism and nutritional value in non-target plants. [Read more](#)

Aptitude of *Saccharomyces* yeasts to ferment unripe grapes for reducing alcohol content of wine



Among the viticultural techniques developed to obtain wine with reduced alcohol content, the use of unripe grapes with low sugar and high malic acid concentration, harvested at cluster thinning, was recently explored. *S. cerevisiae* fermentation performances improved when glucose concentration decreased and malic acid level increased. The conditions that simulate unripe grape must, i.e. low glucose and high malic acid content were found to enhance *S. cerevisiae* ability to degrade malic acid and produce glycerol. [Read more](#)



Antimicrobial properties and death-inducing mechanisms of saccharomycin, a biocide secreted by *Saccharomyces cerevisiae*

It was recently found that a specific *Saccharomyces cerevisiae* strain secretes antimicrobial peptides (AMPs) derived from the glycolytic enzyme glyceraldehyde 3-phosphate dehydrogenase (GAPDH) that are active against various wine-related yeast and bacteria. This study shows that several other *S. cerevisiae* strains also secrete natural biocide fractions during alcoholic fermentation, although at different levels, which correlates with the antagonistic effect exerted against non-*Saccharomyces* yeasts.

[Read more](#)

Upcoming events: VinPro / Winetech Regional Information Days

Paarl / Swartland: 21 September - Nelson Wine Estate

Worcester / Breedekloof: 22 September - Aan de Doorns Wine Cellar

Robertson: 28 September - Graham and Rhona Beck Skills Centre

Klein Karoo: 28 September - Montagu Wine Cellar

Stellenbosch: 29 September - JC le Roux

Olifantsrivier: 12 October - Spruitdrift Winery

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