Inactive dry yeast application on grapes modify Sauvignon Blanc wine aroma

Abstract

This study investigated the potential to improve wine aroma by applying two inactive dry yeast products (IDYs) at the onset of ripening on Sauvignon Blanc grapes. Both products led to increased reduced glutathione concentrations in the grape juice and corresponding wines, as well as differences in individual higher alcohol acetates (HAAs) and ethyl esters of straight chain fatty acids (EEFAs) at the end of fermentation. After two months of storage, a significantly slower decrease of EEFAs and to a lesser extent of HAAs was found for wines made from grapes with IDY applications. These wines also resulted in significantly slower synthesis of ethyl esters of branched acids, whereas varietal thiols were altered in a product-specific manner. The modifications in the wine chemical composition were also sensorially corroborated. This study showed that vineyard additions of IDY products directly on the grapes at the onset of ripening have a subsequent benefit to the production and preservation of aroma in wines.

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