

Riassunto dei lavori presentati
8° Convegno Nazionale di Viticoltura



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THE EFFECT OF CLUSTER THINNING IN DIFFERENT VINEYARD SITES ON AROMATIC PROPERTIES OF RIBOLLA GIALLA BASE WINES AND SPARKLING WINES

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Along with the increasing area of cultivation with Ribolla Gialla in North-Eastern Italy, it grows also the potential for the production of quality monovarietal sparkling wines from this indigenous white grape variety. However, there is little information about the effects of *terroir*, and agronomical practices on the quality of sparkling wines. Therefore, the aim of the present work was to study the effect of cluster thinning in two different vineyard sites and how these factors affect the overall aroma profile of base wines and sparkling wines.

The viticultural trials were carried out during three consecutive growing seasons in two commercial vineyards in different DOC plan districts (Corno di Rosazzo and Casarsa della Delizia) in the Friuli Venezia Giulia region. A completely randomized design with two treatments (UNT, no thinning; and CT, 20% thinning) and three replicates was imposed in each vineyard site. The sparkling wines were produced by the Charmat method, where the base wine is left to undergo a second alcoholic fermentation in sealed 9 litres microautoclaves. By using SPME-GC-MS/MS method, the content of volatile organic compounds was determined in base wines and in sparkling wines.

Several classes of volatiles were tentatively identified in the wines and among those, alcohols and esters resulted as a discriminant for cluster thinning, especially in the sparkling wines, which could be due to secondary fermentation. The sensory evaluation of wines was mostly in accordance with the chemical analysis. Overall, cluster thinning was profitable to improve the aromatic quality of Ribolla Gialla sparkling wines in both locations, proving, that the crop load is crucial factor in order to optimize grape and wine quality.