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Diversity of wild non-*Saccharomyces* yeast population in must and wine during spontaneous wine fermentation

Gurakan G C, Aktuna İ, Seyed Monir E and Cavdaroglu C Middle East Technical University, Turkey

There is an increasing trend to isolate, identify and use non-*Saccharomyces* yeasts in winemaking due to the improvement in aroma quality and complexity of the final wine products. In this study, presence of industrially important selected non-*Saccharomyces* yeasts were analyzed in must and during spontaneous fermentation intervals using real-time PCR. In addition, non-*Saccharomyces* yeasts were isolated from must and spontaneous wine made from 4 different grape types of 4 different provinces, in Turkey and identified by DNA sequencing. The Identifications were completed by sequencing analysis of 5.8S-ITS region (5.8S gene and intergenic regions ITS1 and ITS2) using ITS1 and ITS 4 primers and D1/D2 domain (rDNA regions of 26S gene) using NL1 and NL4 primers. 11 NS species belonging to 6 genera were identified. *Metschikowia pulcherrima, Metschikowia sinensis, Metschikowia chrysoperlae, Lachancea thermotolerans, Wickerhamomyces anomalus, Hanseniaspora uvarum, Hanseniaspora opuntiae, Hanseniaspora guilliermondii, Hanseniaspora meyeri, Rhodotorula mucilaginosa, Starmerella bacillaris* were the isolates of identified non-*Saccharomyces* yeasts from spontaneous wines of 4 different grape types.

Biography

Gurakan G C (Gultekin) is a Professor at Food Engineering Department, Middle East Technical University since 2010. She has completed experimental part of her PhD in German Culture Collection, Deutsche Sammlung von Mikroorganismen und Zellkulturen, Braunschweig, Germany. She held short-term post-doc positions at Kent University, UK, TNO, The Netherlands.

candan@metu.edu.tr

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