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Abstract Special Issue

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

Guzin Candan Gurukan

Middle East Technical University, Turkey.

Abstract:

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 İdentifications 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:

Guzin Candan Gurakan (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.

Publication of speakers:

1. **Gürakan, G.C** et al; Stability of a Recombinant Plasmid Carrying Alpha-Amylase Gene in Bacillus subtilis.
2. **Gürakan, G.C** et al; Characterization of Extracellular Beta-Lactamases from Penicillin G-Resistant Cells of Streptococcus thermophilus
3. **Gürakan, G.C** et al; Effects of Plasmid Curing on Antibiotic Susceptibility, Phage Type, Lipopolysachharide and Outer Membrane Protein Profiles in Local Salmonella Isolates
4. **Gürakan, G.C** et al; Characterization of Local Isolates of Enterobcteriaceae from Turkey
5. **Gürakan, G.C** et al; Combined effect of high hydrostatic pressure treatment and hydrogen peroxide on Salmonella Enteritidis in liquid whole egg.
6. **Gürakan, G.C** et al; Properties of potential probiotic Lactobacillus plantarum strains
7. **Gürakan, G.C** et al; Behaviour and control of Listeria innocua during manufacture and storage of Turkish white cheese.
8. **Gürakan, G.C** et al; Effect of controlled atmosphere storage, modified atmosphere packaging and gaseous ozone treatment on the survival of Salmonella Enteritidis on cherry tomatoes
9. **Gürakan, G.C** et al; Molecular methods for identification of Lactobacillus delbrueckii subsp. bulgaricus and Streptococcus thermophilus using methionine biosynthesis and 16S rRNA genes
10. **Gürakan, G.C** et al; Differentiation of Salmonella Typhimurium from Salmonella Enteritidis and other Salmonella serotypes using random amplified polymorphic DNA analysis

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